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APPROACHING DEATH: RESPONSES TO DYING IN TWO SOUTH ASIAN MEDICAL TRADITIONS

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by

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Dedication

This work is dedicated to my teachers, my parents, William, and Robert.

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Love and Death are words that often appear together, not because they are antonyms, but because we feel them so closely bound. The people we love die, and, with changes in medical technologies, questions have arisen for those inside and outside the field on how best to handle this phase. In 2014, the National Institutes of Health called for a complete re-envisioning of end-of-life care. This dissertation is meant to contribute to that, as well as to increase cultural sensitivity. Finally, it is meant to illuminate the intersection of two medicines occurring in a shared geography but in disparate cultural milieus—the first Islamic and the second Hindu. Each has different conceptions about what generally happens after death—i.e., rebirth versus final judgment. The question I ask is simply what actions were taken or withheld for one fatally ill. In each tradition I examine a broad, foundational text and a narrowly focused one aimed specifically at dying: For Unani that means the *Qānūn* and *Risālah Qabriya*, and for Ayurveda the *Carakasaṃhitā* and *Kālajñāna*. My hypothesis was that different ideas about what happens after death would lead to different approaches to the dying. This, in fact, appears to be the case. In the latter tradition, I identify strong prohibitions against medical treatment for the dying due to its inevitable ineffectiveness. I also identify changes in the conception of death over time. In the former tradition, I see an emphasis on keeping the patient pain-free. My method is philological, with a close reading and acute sense of terminology leading to an

intricate understanding of these approaches plus a glimpse of the driving assumptions and philosophies behind them. Reflecting this work back upon our initial question, furthermore, helps to illuminate a recent shift in the Western attitude towards death, which has implications for care strategies. This research, then, begins with a small, concrete question and leads to broader, more enduring and difficult ones—questions we are all grappling with.

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Chapter 1: Situating the Issue, Setting the Question

Listen! You can hear the grating roar
Of pebbles which the waves draw back, and fling,
At their return, up the high strand,
Begin, and cease, and then again begin...[1]

In the United States in 2016 the leading edge of a wave touched shore. The swell has a name, the Baby Boomers, and marks the first of the post-World War II generation to reach 70.[2] This will continue for nearly twenty years until all of the Boomers have reached at least their seventh decade. Members of a generation that has already been dealing with aging parents and their end-of-life care are moving toward facing such decisions for themselves. This swell along with the emotional and financial costs of the existing care paradigms has brought approaching death into the public discourse. Legislators, doctors, researchers, and social scientists have weighed in. A call to reconceive end-of-life care has been issued from the National Institutes of Health. But the question of what exactly should (and should not) be done remains open and contested. There are those who claim the best path lies in facing one's mortality and forgoing life-extending therapies which may impair quality of life and/or have little chance for success, seeking relative comfort instead. On the other hand, there are those who argue that everyone should have the right to try experimental therapies where the likely outcome is not known, nor the possible negative side effects, but which just might give a dying person a shot at more time. Finally, at the opposite end of the spectrum from those

[1] Matthew Arnold, "Dover Beach," 612.

[2] Conventionally this is based on a start date of the first full year post war. It may be worth noting that I am a part of this group, albeit on the trailing edge rather than the leading one.

wishing for the right to try emerging drugs are those who wish to have the right to die, that is, to use medical means to bring an ebbing life to an immediate end.

Why the issue is so difficult is not due to its novelty. We have been dying as long as we have been living. In fact, authors such as John Gray suggest that it is our concern for the dead which separates us from animals: attention to a corpse makes us civilized.[3] The moment of death, then, is a threshold where the medical meets the cultural and religious. Furthermore, medicine is rooted in culture so that general cultural assumptions and religious beliefs intercalate, acknowledged or not. It is for this reasons that I am particularly interested in examining the topic of death in medical texts from South Asia. It is a place where multiple medical traditions have co-existed and continue to co-exist. Simply being different from our own (informed by different cultural and religious beliefs and with different medical conceptions of life, health, and body), they have the potential to highlight assumptions that are driving our decisions and/or to show alternative approaches. Having multiple medical worlds to delve into also prevents a simple binary comparison which privileges one's own eyes. In exploring multiple medical views, a more nuanced understanding will result. Thus, this study aims to contribute to a re-envisioning of end-of-life care using a method which would support increased cultural sensitivity in addition to undertaking unprecedented comparative work on death and dying in the two aforementioned traditions.

The emphasis is on the premodern period in an attempt to get a view prior to South Asian medical shifts to accommodate or resist the entering form of Western medicine in the colonial period. This is neither to deny that both Ayurveda and Unani were previously in contact with other forms of medicine, most especially with each other,

[3] Gray, *New York Review of Books*, 71.

nor to deny that Ayurveda and Unani were variable and changing traditions. Rather, the aim is to try to get what distance is possible from the Western point of view, keeping in mind that that has shifted over time as well.

The fundamental research question is: What are the medical approaches to death in Unani and Ayurveda? When an individual was considered fatally ill, what was done or not done? However, given that these are different "systems" of medicine from that in the U.S. today, the exploration also has to include how these practitioners decided someone was approaching death.[4] Therefore, the initial question of how death is approached is tied to questions of how death is conceived of and how its approach is determined. What is the nature of death, and what are the signs of its imminence? The full question then is: What is death, i.e. what determines and defines death in these medical traditions; how does death show its approach, i.e. what are the clinical indications that point to irrecoverability; and, once the determination is made that the patient is to die, what is done or not done about it? What attitudes and actions are exhibited? What advice (ethical/ moral/ philosophical/ practical/ medical) might be given, and to whom? (Since this study is framed in a medical context, the *by whom* in this case would be physicians, assistants, or any others the medical texts might mention. Actions beyond that are outside the scope of this work.)

In order to answer the research question in its full breadth, representative texts are needed from Ayurveda and Unani. These two are being examined because they both have long textual and practice histories in South Asia, which continue today. However, each is centered in a separate cultural milieu within different philosophical and religious

[4] The use of the term "system" will be discussed presently in the literature review. Some prefer the term tradition in order to highlight the variability and changeability seen. Tradition is the term I choose to use in the title of this work in order to help capture the sense that these medicines are occurring within broader cultural milieus.

associations. In neither case are they simply identifiable with that milieu; nevertheless, I hypothesized that appreciable difference would be seen between the two in their understanding and handling death because of differences in worldview. There are, for example, substantial differences in what is expected after death due to dissimilar religious beliefs. Hindus and Buddhists share a concept of rebirth in contrast to the Muslim belief in final judgment.[5] Thus, one might expect a varied sense of what happens after death to lead to varied treatment beforehand: What is at stake would be perceived differently. Moreover, while these are not the only longstanding medical traditions in South Asia, they are the two most common and have had the greatest historical impact. Siddha occurs in a relatively restricted geographical area as does Tibetan medicine. Both have acknowledged similarities to Ayurveda, and in both cases are still in milieus where rebirth is the general expectation after death. Therefore, neither of these adds unique information in that regard. The choice to study Unani and Ayurveda side by side also has to do with their historical geography. There is more to say in this regard, but for the moment suffice it to say that one point of interest is, at times, their geographic coexistence and/ or proximity.

Within the two chosen traditions what is needed to answer the questions posed are sources that encompass both theoretical and practical aspects of the medicine, ideally in a single source to minimize changes of perspective over time or from author to author. That is, a list of *materia medica* might tell us about remedies that were applied, but is not likely to also include enough of a theoretical base so that a definition of death can be directly witnessed or inferred. Conversely, a text that just gives a theoretical basis of the medicine would not necessarily include steps to be taken or not taken in the case of one

[5] Why I mention Buddhism here will be discussed below.

fatally ill. This type of single but encompassing text is an ideal to aim for rather than a definitive solution because of the nature of textual history in South Asia. In Ayurveda especially, primary source texts tend to have a number of redactions and are often of a composite nature. Even when a particular name is associated with a text, it may represent more of an editorial role than an authorial one. In a study of this size, it is not possible to survey and translate many texts and to go deeply into a pair of comprehensive texts as well. Therefore, the choice has been made to do a thorough investigation of a set of texts of an encyclopedic nature complemented by a pair with a narrow focus.

Choosing a recognized foundational text is one way to ensure the information in it speaks in some way to the tradition as a whole. Of the early ayurvedic texts, only four are from before the first half of the first millennium of the Common Era, and only two of those are broad and relatively complete.[6] This leaves the choice between the *Suśrutasaṃhitā* (SS) and the *Carakasaṃhitā* (CS). Given that the SS focuses on surgery and the CS on general medicine, the latter is the natural choice. It offers the broadest view on health, life, and death. With this text in mind, Cerulli writes about ayurvedic medicine that "...it crystallized as an organized system of ideas and instructions for medical practitioners and their patients in the early centuries of the Common Era with the redaction of the *Carakasaṃhitā*, which was and continues to be recognized as the tradition's most comprehensively sustained treatise."[7] Here Cerulli not only points to the ongoing importance of this text within the tradition, he suggests, in essence, it forms the very start of the system as we know it. He also alludes to the purpose of the text with the word "instructions." The text appears to have been used for teaching. Though Caraka is

[6] Dagmar Wujastyk, "Medicine, Immortality, Moksha: Entangled Histories of Yoga and Ayurveda and Alchemy in South Asia," accessed May 31, 2017, https://www.academia.edu/11543403/Medicine_ Immortality _Moksha_Entangled_Histories_of_Yoga_Ayurveda_and_Alchemy_in_South_Asia.
[7] Anthony Cerulli, *Somatic Lessons: Narrating Patienthood and Illness in Indian Medical Literature,* 34.

the name associated with the compilation (*saṃhita*), he is not considered its author. In a mythical lineage given in the text, this school of medicine is attributed to Ātreya. Ātreya, it is said, then teaches it to Agniveśa. In fact, a precursor text to this was supposed to have existed with the title *Agniveśa Tantra*.[8] As Freud is to have said of cigars, "Sometimes a cigar is just a cigar," one may also say of names, "Sometimes a name is just a name." Still, it is curious that the name *Agni-veśa* breaks down to the compound fire-dwelling. Given that the human body holds the digestive fire as a sacrificial altar holds sacred fire, "abode of fire" would be a fitting name for the human body which is the subject of medical treatment.

No critical edition of the CS currently exists. Though one is being worked on at the University of Vienna, it is not available for use, nor will it be for some while. Therefore, the Sanskrit will be drawn from a 2015 reprint of the Chowkhamba Sanskrit Series Office publication.

To complement this broad focus, a text from the Ayurvedic tradition which focuses particularly on knowledge of death will be used. Authorship of the *Kālajñāna* (KJ), whose title literally means knowledge of death or knowledge of time, is attributed to Śaṃbhu in the work itself. Śaṃbhu, being an epiteth of Śiva, likely points to a mythical lineage rather than an actual author. Little has been known about the work given that no scholarship on the text exists in English or major European languages. No translation of the text into these languages, partial or complete, has existed prior to this dissertation either. Therefore, work on it represents a new contribution to the field. KJ's sphere of influence in South Asia may be able to be partially and tentatively deduced from the location of copies of this manuscript as per the *New Catalogus Catalogorum*.

[8] Ibid., 37.

Historically, of course, it could have had a different sphere of influence, but from the start of the 19th century manuscript copies have been concentrated in the northwest of the subcontinent.[9] I currently have images of 15 manuscripts of the KJ. Further manuscript collection and the creation of a critical edition will be a later project. The primary manuscript I use in my translation comes from the holdings of the Staatsbibliothek zu Berlin. In that collection, it is manuscript number 948, but also has the signifier of Chambers 542. The manuscript copy date is Samvat 1693. As any South Asianist knows, the date a manuscript is copied may be hundreds of years or more later than when it was first written down, let alone from when it was first composed. Dating of the composition of this treatise will be explored further in Chapter 4.

The second grouping of texts, those in the Unani medical tradition, face the same requirements as the first set of texts. There is a desire for one that is broadly representative and encompassing. This is both to answer the posed questions about death and to act as a parallel to the first grouping so that meaningful comparative work can be done. Thus, ideally, we would like a foundational text and a text which more narrowly focuses on death.

The issues with Unani texts, though, differ from those in the ayurvedic cluster. For this is a medicine with roots outside of South Asia. Works in Arabic and Persian continued to be actively used in teaching until a generation or two ago and are still consulted by hakims. When texts are imported, where is the line between a South Asian expression of the medicine and an earlier one? Can it even be determined? One way is to consider which texts are regarded by those in South Asia to be foundational and which are still consulted today as well as which have translations into local languages. Ibn

[9] This will be further discussed in Chapter 4, as well as the dating system used by the text.

Sina's *al-Qānūn fi'l-ṭibb* (Q) fits this description. Rahman, a practitioner and historian of Unani, writes of it: "From the time of its compilation to this day *Al Qânūn* has been a source of treasured information and is considered the last word on the art of medicine."[10] He describes not only the importance of the treatise for Unani but also its presence as a textbook in the medical schools of Europe. A lineage of students began in Central Asia with Ibn Sina, but as for its influence in South Asia, Rahman states: "Even though neither Ibn Sīnā nor any of his disciples visited India, the extent of influence he exerted on the physicians of India, and the amount of time and energy Indian physicians spent on the study of his books is unprecedented."[11] The text has had a major impact in a land Ibn Sina never (so far as we know) traveled to. First written in Arabic by a native speaker of Persian, it has inspired 19 Urdu translations and commentaries, granted the translations are for the most part partial.[12] As of today, there is still no complete English translation of all five volumes of Q, though Jamia Hamdard in New Delhi is working towards one. They have recently completed three out of the five volumes with work begun on the remaining two. Their English translation is based upon Jamia's own critical edition of the Arabic text. It is worth noting that the previous English translation coming out of South Asia was in fact based on an existing Urdu translation.[13] That particular translation includes only the first volume and was produced by Mazhar H. Shah and published by Naveed Clinic in Karachi. The Urdu he drew from was the work of Kantori, and it is precisely Kantori's Urdu work I will consult along with the Jamia Hamdard volumes.[14]

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[10] Syed Zillur Rahman, *Commentators and Translators of Ibn Sīnā's Canon of Medicine,* 22.
[11] Ibid., 16.
[12] Ibid., 13. Of the 19, about half are commentaries and half translations.
[13] Ibid., 200.
[14] The Jamia volumes in English were consulted to identify sections and passages of interest to the topic at hand. These were then be located in the Urdu language text and translated. The difference here is that translating directly from the Urdu rather from English which came from Arabic will hopefully allow a

Kantori's translation, of at least the first four volumes, is said to have been completed in 1885 with various volumes published at various dates by Naval Kishore in Lucknow.[15] I will be working from a 1930s reprint coming from the same publishing house and based on a handwritten rather than a movable type copy. Its Urdu title is *Tarjamah Qānūn Sheiḵh Bū 'Alī Sīnā,* i.e. the *Translation of the Canon of the Venerable Abu Ali Sina*, and will be distinguished from the Arabic text or comments which do not necessarily refer to a specific translation by the abbreviation tQ rather than simply Q.[16]

This text is of interest beyond the fact that it is a fundamental Unani treatise for South Asian practitioners and has influenced European medicine. Its geographic origins are noteworthy given that Ibn Sina hails from Bukhara. Why would that matter in the context of this study? The simple answer is that Central Asia bumps up against South Asia, but a fuller explanation requires mention of Buddhism and medicine.

As early as 1998 when *The Roots of Ayurveda* was published, Dominik Wujastyk pointed out the appearance of Buddhist ideas in the classical medical texts, such as the emphasis on moderation that he associates with the Buddhist teaching of the Middle Way and which he finds explicitly stated in Vāgbhaṭa's *Heart of Medicine* thus: "One should follow the Middle Way in all things."[17] However, he does not make a call about the direction of influence, only suggesting more research be done.[18] Zysk is less cautious. He argues that this medicine began to take on its known form due to wandering ascetics. He argues that Caraka is a term that did not come from a personal name, but rather is to be taken in its meaning of one who wanders, as seen derived from the Sanskrit verbal root

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closer view of the South Asian understanding of the text—Urdu currently being the most common mother tongue of Unani practitioners in South Asia.

[15] Syed Zillur Rahman, *Commentators and Translators*, 165.

[16] Note that Bū is short for Abū.

[17] Dominik Wujastyk, *The Roots of Ayurveda*, 215.

[18] Ibid., xviii.

car, to walk, roam about, wander.[19] And though he sees these ascetics as beginning the process, he argues that it soon moved into the monasteries. Zysk goes so far as to suggest that Buddhists may have been "the principal renunciant thinkers who aided in the organisation, development, and dissemination of Indian medical theories and practices."[20] Furthermore he suggests that the medicine was not simply practiced in the monasteries, but also by the start of the common era taught there; he names Taxila as the most renowned in this regard.[21] This suggestion of its relative importance is supported by Naqvi who describes the medical instruments found here as the *only* surgical tools "known to have survived from antiquity" in South Asia.[22] He goes on to argue that surgery essentially ends with the destruction of the Buddhist monasteries although the descriptive texts survive.[23] The practice of surgery definitely falls away, but whether this is the definitive cause or not, the importance of the geographic location of Taxila remains. It is in the northwest corner of South Asia. Thus, it is not surprising that Zysk states: "The symbiotic relationship between Buddhism and medicine facilitated the spread of Buddhism in India, led to the teaching of medicine in the large conglomerate monasteries, and assisted the acceptance of Buddhism in other parts of Asia."[24] Asia is the term in common in the geographic designations of South Asia and Central Asia and points to the fact that Asia is continuous between the subareas of 'South' and 'Central.' They meld. And Buddhism also melded from the one verbally delineated region into the other. In other words, Buddhism clearly spilled into Central Asia.

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[19] Kenneth Zysk, *Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery,* 33.
[20] Ibid., 2-3. The verb and substantive are also present in Pali and Gāndhārī as *carati/caraka* and *caradi / caraga* respectively.
[21] Ibid., 46. Note this puts the teaching of medicine in the monasteries, so certainly its development, prior to the writing down of the CS.
[22] N. H. Naqvi, *A Study of Buddhist Medicine and Surgery in Gandhara*, xi.
[23] Ibid., 110
[24] Zysk, *Asceticism and Healing in Ancient India,* 6.

More recently, and in ways significant for this study, Wujastyk has touched upon the question of Buddhism and its relation to Ayurveda again. In his examination of models of disease in Ayurveda, he begins with a Pali story where the Buddha lists possible causes of pain. Wujastyk notes that "this is the first moment in documented Indian history that these medical categories and explanations are combined in a clearly systematic manner, and it is these very eight factors which later become the cornerstone of the nosology of classical ayurveda."[25] That this first documented moment of medical categories is related to pain, and presumably therefore also related to attempted management of or avoidance of pain, is noteworthy. Wujastyk goes on to state: "The formality of the vocabulary in the Buddha's list of causes of pain suggests that he was consciously referring to a form of medicine that had a theoretical underpinning."[26] He does not come out and say this was a Buddhist development, but the fact that this is the first documented location begins to suggest the possibility of its development in that milieu, at least in this iteration which persists into classical Ayurveda. He gives a second example from Buddhist writings in Aśvaghoṣa's *Buddhacarita,* a text which predates the CS by some 50 or 150 years. Here the characters greet each other by asking about the "equality of their humors."[27] Wujastyk points to the fact that this indicates that the audience would have to have understood what this meant. It was part of common knowledge before the first of the classical medical texts of Ayurveda was written down. Still, it has always been recognized that many a Sanskrit text was composed long before pigment was put to writing material. But Wujastyk goes further in examining the lists of causes of pain and notes that the Buddha uses a word that is "not just an ordinary item of

[25] Dominik Wujastyk, "Models of Disease in Ayurvedic Medicine," 38.
[26] Ibid.
[27] Ibid., 42. It is worth noting, to prevent any possible confusion, that he stresses here the difference between equality and balance.

vocabulary," but a technical medical term: that term is *sannipātika* as used in the Pali and also as seen in Sanskrit.[28] For us this is not just an ordinary word either: In the CS it is associated with untreatable and often deadly diseases. It will be central to our discussion in Chapter 5.

In regard to the humoral model which is the key element of Ayurveda, Wujastyk notes that "one sometimes senses that the model was being stretched, or applied as a veneer over older, folk traditions."[29] This echoes something he wrote in the *Roots of Ayurveda* when he pointed out that the *doṣa*s are not mentioned in Vedic literature. In regard to that literature and the medicine, he states: "Of course there are some points of contact, but the overall sense is that, culturally speaking, Ayurveda comes from somewhere else."[30] In regard to that somewhere else, he mentions Zysk's work and Buddhist monks. And veneer is precisely the word Zysk uses in his sense of how a Buddhist medical tradition became Brahmanized. In describing the process, he writes:

> This involved the transformation of a largely heterodox repository of medical knowledge into an orthodox brahmanic science by the application of a Hindu veneer which used a Hindu mythological structure to sanction this new source of useful knowledge. The completion of this process marks the beginning of the 'classical' phase of Indian medical history.[31]

This means that the medicine did not change, just the story of the medicine. Zysk adds that for such sanctioning origin myths are particularly important. He points out that a tale of a perfect line of transmission from gods to man in the SS ends with: "I am Dhanvantari, the first god to remove old age (*jara),* disease (*ruja*), and death (*mrtyu*) from the gods. I have come forth in this world to teach major surgery and the other parts

[28] Ibid., 38. The Sanskrit term is *sannipātaka.*
[29] Ibid., 42.
[30] Wujastyk, *Roots,* xxiv.
[31] Zysk, "Mythology and the Brahmanization of Indian Medicine," 3.

of *ayurveda."*[32] Zysk addresses the connection of this triad of old age, disease, and death with what Siddhārtha sees as a young prince upon leaving his palace—a story central to Buddhist doctrine. Zysk also argues that in such cases where knowledge shifts between traditions that "remnants of prior paradigms" remain.[33] This supports what Wujastyk concludes in his work on disease models, namely that multiple models can be discerned in this medical tradition.[34]

However, we are following this thread primarily for geographic implications rather than to assign origins. And along these lines, Olivelle, in the process of examining Sanskrit terms for medical practitioners, speaks of a Mauryan period rock edict in which Aśoka "boasts that he promoted the medical profession and expanded the supply of medical products both in his territory and in foreign countries."[35] In regard to the countries being referred to, this edict mentions the Greek King Antioches whose country would have included a good part of Central Asia. This is evidence of the flow of medicine across borders. Beckwith adds to this evidence. In his *Warriors of the Cloisters*, he argues that the madrasa was essentially identical to the Buddhist college structurally and functionally, and he calls Gandhara the south eastern most part of Central Asia.[36] Furthermore, he argues that this area is precisely where the oldest of the Buddhist colleges is to be found, in Taxila.[37] What is important for him is tracing the recursive method from its role in Buddhist discourse to its use in Islam, and what he wants to

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[32] Ibid., 6.
[33] Ibid., 4.
[34] Thomas Laqueur find this phenomenon as well when he looks at models of gender in the west; a dominant model is generally present, but traces of others can be seen at any given time. See Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud,* Cambridge: Harvard University Press, 1990.
[35] Ibid.
[36] Beckwith, *Warriors of the Cloisters,* 41.
[37] Ibid. He dates it to ~50 B.C.

emphasize is the endurance of people in a geographic region across changes in regime or religion. Thus, of the recursive method, he states: "It did not 'go' anywhere."[38] The people who practiced it still practiced it as Buddhist or as having converted to Islam. A transfer in the usual sense of the word was unnecessary. Along these line, he argues, "the institutions were converted to Islam along with the people."[39] Presumably medical knowledge would be included in what "did not 'go' anywhere." We will see a possible example of this in Chapter 5 where the Q has much concern with pain and pain management, echoing the early Buddhist association of pain and medicine documented above.

If, as suggested by Zysk, the primary genesis of Ayurveda occurred in a Buddhist setting, and if Taxila was foremost in the preservation and dissemination of that medicine, then these two foundational medical texts, CS and Q, may possibly be products of neighboring, and in some respects overlapping, regions. This becomes of further interest for this study given Beckwith's claim that the scientific method in the West does not ultimately rely on advances in Greek thought but rather was launched from the interaction of Buddhist didactic methods meeting with Islamic scientific thinkers. He places that point of fertilization as Bukhara and the moment with Ibn Sina and with this very text: *al-Qānūn fi'l-ṭibb* (Q).

What is important in regard to Beckwith here is not whether one fully agrees with his claims about the result of this interaction or not; the importance lies in the fact of its highlighting the interaction at all—in conceptually placing these Buddhist of northwest South Asia against a Central Asian Islamic scientist and philosophical thinker. For when we think of Unani, Persia may not be what comes to mind. Unani is a term which literally

[38] Ibid., 94.
[39] Ibid. 93.

means Greek, and the medicine has been described by Syed Zillur Rahman as the Greek system of medicine "which was developed during Arab civilization."[40] Likewise, Ayurveda is often called "Indian Medicine" and today is commonly associated with Hindu traditions and thought. Such points of view put Q and CS continents apart when in fact they may have grown out of similar soils.

As with the text grouping in Ayurveda above, the aim with Unani is to supplement an encyclopedic work on general medicine with one which is more narrowly focused on death. For this purpose, another scarcely known text was chosen. Like the KJ, the *Risālah Qabriya* (RQ) has no previous English language translation or scholarship. Urdu scholarship does exist and suggests the work goes back to Hippocrates as the original author. Some evidence, however, suggests otherwise and will be discussed more thoroughly in Chapter 6 where an attempt will be made to locate this text in time. Its position as an appropriate text for this study will also become clearer as a result of that discussion. RQ's subject matter, being the signs of approaching death, is right on target. Its title, though, may be a bit misleading as it literally means the *Grave Treatise*. The patients under examination are not dead yet, but the title implies the grave nature of the illnesses being considered. Coincidentally, Kantori, who is the translator of the Q into Urdu, is credited with the translation of this work from Arabic into Urdu as well. I have two copies of his translation which were published by Naval Kishore. One is incomplete and is from 1930, the other is complete, appears to be identical, and is from 1937. Each has the Arabic and Urdu side by side.

By definition, foundational texts in any tradition would be well studied, and that is true for both the CS and Q in relation to their respective traditions. However, a

[40] Rahman, "The Heritage of Unani Medicine and Its Growth in Modern Times," 9.

comparative study of these major works in relation to death as outlined above has never been attempted. These minor works related to death have neither been translated nor studied in western scholarship. Thus, this dissertation is groundbreaking in several respects. Of course, given the plethora of medical texts across the centuries and in multiple languages in each tradition, it would be easy to argue for alternate groups of texts. However, the inclusion of even more texts within this same research and writing period would lead to a patchy examination, risking missing occurrences of the mention of death and dying in unexpected places within a particular work. In such a situation, therefore, one would be more likely to find what was expected and to miss surprises. Moreover, given that this type of comparative work has not been done with death and dying, foundational texts are a logical place to start. The more eclectic, shorter texts add a later perspective which has not previously seen the light of scholarship. Finally, given that the purpose of this study is not only to advance the field of Indology but to gain insight on a current social issue, one could say there is no wrong place to look. What we will encounter are ideas that have existed in medical treatises in the context of perpetual human grappling with death, and, as such, have the potential to tell us things we do not know, have not seen quite that way before, or maybe even once knew but have forgotten.

Once these texts were chosen, located and imaged, necessary passages were found and translated. For the shorter works this means they were translated in their entirety while for the multi-volume works it means passages related to the topic were examined and translated. In the latter case, in the interest of efficiency, the texts were read in English to locate passages of interest which were then located in the original language texts and translated. Because it was an actual reading of the text rather than individual word searches, passages could be located which involved a concept by implication rather than by direct terminology. All occurrences of each concept were noted. These include

death, die, dying, dead; longevity, lifespan, preservation (of life); curability, treatability, manageability, fatal. An example from a Unani text from the first set of terms is: "*lekin agar maraẓ-i ḥadd ho bū-yi tursh bul kī maut par dalīl hai*."[41] That is, but in the case of extreme illness, sour-smelling urine signifies death. An example from an ayurvedic text is: *kālasya pratiṇāmena jarā-mṛtyu-nimittajāḥ / rogāḥ svābhāvikā dṛṣṭāḥ sva-bhāvo niṣpratikriyaḥ*.[42] Thus: The diseases seen with the advancing of time producing the signs of old age and death are of our own nature; what is one's nature is irremediable. An example from the category of curability from that same text is: *bheṣajaiḥ sādhya-yāpyāṃs tu kṣipraṃ bhiṣag upācaret / upekṣita daheyur hi śuṣkaṃ kakṣam iva analaḥ*.[43] That is: But the physician should quickly attend to those [diseases] which are to be supported and those which are curable with remedies because if neglected they would consume [the patient] as fire consumes dry grass. An example from a Unani text is: *aur jo vaja' shadīd ho akṯar qātil hotā hai*.[44] That is, and when pain is severe, generally it is fatal. The whole collection of such passages is my primary data set.

Once I had comprehensive representative units of analysis from all texts of interest, I used philological methods to illuminate an aggregate meaning of death, its indications, and medical approaches for the ayurvedic texts as unit which is reported in Chapters 3 and 4. I repeated this process for the Unani texts as a second group and report those findings in Chapter 5 and 6. Having isolated and identified these respective medical understandings of the topic, I then examine areas of contrast and overlap by identifying and combining common themes. The cross-tradition findings are discussed in chapter 7.

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[41] Kantori, *Tarjamah Qānūn Sheiḵh Bū 'Alī Sīnā*, 186.
[42] Agniveśa, *Caraka Saṃhitā*, Śā, 1.115.
[43] Ibid., Ci., 17.69.
[44] Kantori, *Tarjamah Qānūn Sheiḵh Bū 'Alī Sīnā*, 285.

What precisely do I mean by using philological methods? I mean it in the sense Selby takes it in her article "The Color of Gender." There she writes: "I have chosen to operate in the realm of an engaged, analytic philology, which begins with close readings of texts and ends in bringing these rich materials into broader conversation with larger social and historical institutions and constructions."[45] One thing this allows, for instance, is that by understanding the nature and strength of the oral tradition in South Asia, one may give up the idea of an Ur-text, realizing that several recensions may have appeared independently and manuscripts may not share a single written precursor. Another thing this means is not taking word meaning so narrowly that conflicting clues are ignored. In *On Philology*, Johnson gives the example of a ransom note in a piece of fiction attempting to appear to be from a communist, so signed "Red," but written in "black English."[46] She reflects:

> What is at stake, then, is clearly the nature of reading; the question is not whether to be philological but how to read in such a way as to break through preconceived notions of meaning in order to encounter unexpected otherness—in order to learn something one doesn't already know.[47]

The key here is to use the method to break through one's preconceptions. An example of this closer to home (i.e., South Asia) is the work of Zimmermann in his renown *The Jungle and the Aroma of Meats.* Jungle today brings to mind verdant, wild lands packed with plants and animals. However, Zimmermann emphasizes the historic meaning of the Sanskrit word *jaṅgala* as dry, uninhabited lands, and so he opens up a broader understanding of concepts and categories in ayurvedic medicine. He writes about this shift of meaning as "one of the shifts in concepts which have hollowed out a chasm of

[45] Selby, "The Color of Gender," 6.
[46] Johnson, "Philology: What is at Stake?", 29.
[47] Ibid.

incomprehension between ancient India and ourselves."[48] Lack of this knowledge confuses the reader with all the wrong associations. Implicit in this statement is the importance of working in original languages and having an understanding of meaning in the context of a given work, culture, and in relation to linguistic shifts over time. Thomas captures this in the following encompassing definition of philology:

> The term philology has wide coverage: it is a component of textual criticism and editing, the writing of commentaries, stylistic and metrical studies, as well as those modes of interpretation and literary history wherein the notions of 'affection,' 'respect,' or 'close proximity' to the text are maintained. At the same time it draws from history, archaeology, paleography, epigraphy, historical linguistics, anthropology, the study of religion, and critical theory, for all of these potentially aid in the quest for facts and truths about literary texts.[49]

This is the sense in which the method of this dissertation is philological.

The general structure of the dissertation has been suggested above with the mention of certain texts being discussed in certain chapters. However, a more complete and explicit overview will now be given. The first chapter, this one, introduces the research project and its purpose. The main research question is articulated, and associated questions are discussed. The research design follows that, including the texts to be consulted and translated as well as what data will be drawn from these texts. Additionally, the method of analysis is given here. The significance of the study, both within the field of Indology and beyond, is woven into this chapter. Typically, a literature review would be present in the first chapter, but I have set that off as an independent chapter due to considerations of length. Dealing with two medical traditions and a topic of current interests calls for a somewhat more extensive review than is often needed. However, the outline of the study is given here at the close of the first chapter.

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[48] Zimmermann, *The Jungle and the Aroma of Meats,* 19.
[49] Ibid., 69.

As noted earlier, Chapters 3 and 4 are those dealing with the ayurvedic texts. The more general text will be dealt with first, followed by the one with a narrower scope. Within these chapters, the nature of death is considered as it relates to descriptions of lifespan and the moment of/or definitions of death itself. This is followed by an examination of symptoms and signs in relation to the concept of curability and in relation to the process of dying. These provide the basis for the examination of the medical approaches to death.

Chapters 5 and 6, again as previously mentioned, work with the Unani materials. The same major spheres are examined in regard to the nature of death, signs and symptoms, and medical approaches to death. Chapter 7 is where the comparative work is done. Observations, conclusions, and the limitations of the study will be discussed, as well as potential avenues for additional research. With this general structure in mind, we may now move into a more concrete and detailed contextualization of the study by means of the literature review.

Chapter 2: Situating the Question

sham‘ bujhtī hai to us men se dhū’ān̲ uṭhtā hai
sho‘la-i ‘ishq siyāh-posh huvā mere ba‘d.[50]

The candle is snuffed, yet smoke still rises:
The blaze of love, after I pass, stands clothed in black.

FRAMING DEATH

This chapter will explore in some detail the issues around and stances on end-of-life medical treatment in the U.S. and South Asia today. For, though the root question of this study is about ways the dying patient has been handled in the premodern period within Ayurveda and Unani, the current issues in the West and in South Asia set the stage for the study and drive the question. Following that discussion, scholarly work which informs the root question (on medical approaches) and the attendant ones (on indications of death and the nature of death) will be examined.

Death may be seen as an end or the end, but in many ways it is central. Religion, culture, politics and medicine meet on this threshold (and do not always remain discrete). Thus, there are different frameworks for looking at death and dying beyond the medical. Furthermore, there are substantial bodies of literature which bracket this study. For example, there is aging on one side and mortuary rites on the other. Here, aging is the more important. For, as Atul Gawande has pointed out, death is changing. Or, to be more precise, our entry into it is. For most of history, dying was like stepping over an unseen cliff: one was walking on level ground then suddenly falling. After that one step, the end came quickly. Furthermore, the edge could appear anywhere along the way,

[50] This verse is given as it appears on the wall of Ghalib’s Delhi residence. Translation is my own. The transliteration system I am using is that of U.S. Library Congress which leaves a space after the izzafa. Because there is not a single standard in use, the izzafa vowel will often also be seen as *e* not *i* and without the space. When I quote from Urdu works, I will leave in place the transliteration system as it appears in the quoted text.

indiscriminately, from birth to old age. The first change Gawande describes is a pushing back of the cliff: "By the middle of the twentieth century, just four out of every hundred people in industrialized countries died before the age of thirty."[51] The road got a little less dangerous, at least on one end. The next change he describes is a protraction of dying, or at least of decline. He writes that now "instead of just delaying the moment of the downward drop, our treatments can stretch the descent out until it ends up looking less like a cliff and more like a hilly road down the mountain: The road can have vertiginous drops but also long patches of recovered ground."[52] Continuing in terms of his metaphor, then, the drop-offs remain sporadic and unexpected, like potholes rather than the rhythmic, hence predictable, jarring of a dirt-road washboard. Therefore, the final drop may be indistinguishable from the rest right up until the end completes itself. Gawande gives one final trajectory, but prior to relating that it is necessary to consider for a moment Philippe Ariès's models of death in a history of Western attitudes towards it. Already, however, we see death becoming more closely linked to aging.

Ariès covers a thousand years' time and finds five distinct attitudes towards death, each of which is formed by the confluence of four elements.[53] When one or more of the thematic elements change, a new model appears. These themes involve awareness of the individual, defense of society against untamed nature, belief in an afterlife, and belief in the existence of evil. Several of these themes make an appearance in this dissertation, but what is pertinent here is the way these come together to make one particular model Ariès

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[51] Atul Gawande, *Being Mortal,* 26. Whole discussion 25-29. He draws this information from *Health, United States, 2012 with Special Feature on Emergency Care*, a publication of the US Department of Health and Human Services, Centers for Disease Control and Prevention, and National Center for Health Statistics. Hyattsville, MD 2013. India is not one of the countries included in the life expectancy statistics, so we cannot assume an identical trajectory for South Asia. However, it is clear, as will be discussed below, India has an increasing elderly population.

[52] Philippe Ariès, *The Hour of Our Death*, 602.

[53] A comprehensive history on Indian attitudes toward death would be a worthwhile project, though given regional, religious, and language diversity, such a project would best be carried out by a team.

calls "The Invisible Death."[54] When he published the book in 1981 after 15 years of working on it, this was described as the contemporary model. (As will be seen, I argue that significant changes have occurred since then and that part of our end-of-life care crisis is a reflection of shifting attitudes.) In this model, simply speaking, a solicitousness toward the individual led those around him or her to "protect the dying or the invalid from his own emotions by concealing the seriousness of his condition until the end."[55] As a result, therefore, "when the dying man discovered the pious game, he lent himself to it so as not to disappoint the other's solicitude. The dying man's relations with those around him were now determined by a respect for this loving lie."[56] In other words, the original set of benevolently driven actions is reinforced by the ill person in a kind of unspoken acknowledgement of the care and concern of the caregivers. When dying becomes medicalized, Ariès finds this dynamic penetrating medicine and coloring those interactions. He writes: "Under these conditions it was better to communicate silently in the complicity of a mutual lie."[57] Medicine submitted to the imposition of denial.

This, in fact, may have had a deep impact on the development of end-of-life care in the West and would constitute a fruitful area of study in and of itself.[58] Yet, that is not the sole shift Ariès sees accompanying the medicalization of death. He states that "the community feels less and less involved in the death of one of its members" due to a decline in the sense of community in general, and "because it no longer thinks it necessary to defend itself against a nature which has been domesticated once and for all

[54] Ibid. See also discussion 611-14.
[55] Ibid., 612.
[56] Ibid.
[57] Ibid.
[58] Simply fleshing out the characteristics of our latest attitude toward death could also be helpful. This dissertation may aid in such a characterization.

by the advance of technology, especially medical technology."[59] Medicine, for the moment, gets equated with perfection: It has completed the task of subduing the brute world. But death remains a hole in its mantle of domination. This leads to not merely partial but now full-fledged invisibility of the topic because, if acknowledged, it underscores defeat. Per Ariès: "We ignore the existence of a scandal that we have been unable to prevent; we act as if it did not exist, and thus mercilessly force the bereaved to say nothing. A heavy silence has fallen over the subject of death."[60] Ariès proposes that it is shame which leads to these actions, this denial. We are ashamed that, in spite of it all, we die. All of our technological and intellectual advances continue to be stymied by death. The point I wish to make, though, is that this "game" of denial is made easier when the end is obscured by a number of false starts, or false ends if you will—all those pot holes that have a bottom before finally hitting the one that has no bottom. Attitudes and a changing trajectory of death come together to make the current end-of-life care situation possible: It is not clear if this is the end, so we treat it as though it is not, partially out of shame, partially out of benevolence. Thus, we care for the dying as if they are not dying.

However, Gawande would argue that medicine has altered the trajectory of death yet again. The arc of decline has primarily made it past the bumpy section of road. He states that due to "maintenance measures and patch jobs" that generally now "the curve of life becomes a long, slow fade."[61] This kind of slow listing downwards eliminates the many dramatic crises points with their accompanying dramatic upswings. Though a more understated type of decline, in some senses it is more pointed. The direction is clearer,

[59] Ariès, *The Hour of our Death*, 612.
[60] Ibid., 613-14.
[61] Gawande, *On Being* Mortal, 28.

and medicine does not dash in (and out) as hero. It is more likely to come in slowly and quietly stay on.

This shift in the typical trajectory of death towards steady decline, which by its clear direction would make denial more difficult, may be a factor in our changing or changed model of death. For attitudes appear to have altered since Ariès published *The Hour of Our Death*. For one thing, the silence has been broken. Death is a hot topic—news articles, opinion pieces, even TV ads bring up death. Barbara Moran, a science writer, openly expresses thoughts about her mother's passing: "I made peace with her death, but not with her dying. She had four months in the I.C.U., endless and pointless and painful procedures, and final days full of fear and despair. Why is this medicine's default death for so many people?"[62] Her sentiments voice the feelings of many who have gone through such experiences. She goes on to state: "My mother's brutal death exposes so many flaws in American medicine: our lack of palliative care, our unwillingness to face end-of-life decisions, our inability to stop the procedures and just let go."[63] What medicine might be most condemned for is a silence compliantly entered and the ramifications of that act, but with the original, unspoken pact mainly overlooked or forgotten. What was a joint agreement becomes the sole possession of the hospital.

As for this silence, already at the end of his substantial work Ariès intimates the beginning of a shift away from the Invisible Model. He remarks that silence is occasionally broken, though at that point still inconsequentially. In addition, he states that there are a few who wish to "humanize" death rather than ignore it.[64] Exploring these

[62] Barbara Moran, "Not Just a Death," *New York Times*, February 6, 2016. The answer to this question may be related to our (previous) attitude towards death, while insight to help us change our current medicalized approach is a goal of this study. We know what we want to move away from, but need to develop ideas about where we want to go.

[63] Ibid. Interestingly, her response to her mother's brutal medicalized death was to become an M.D, hence her use of the possessive pronoun "our."

[64] Ariès, *The Hour of Our Death*, 614.

threads could also be illuminating—research that I will leave to another. My interest here is that, as Gawande indicates, more of us are making it to old age due to shifts in medicine and medical technologies. Though it is not "a diagnosis," as he points out, old age is what many of us will in essence die of.[65] Death becomes a "problem" of aging rather than of life.

Thus, current works on aging, whether written in the East or the West, often entail dying and vice versa. In *White Saris and Sweet Mangoes*, for example, Sarah Lamb states that she "explores aging as a means of gaining perspective on notions of gender, the body, kinship, and the forces of culture" in West Bengal.[66] Yet, her conversations with elderly women help to elucidate a different model of death than the one described above. When a woman matter-of-factly mentions she will no longer be alive when Lamb returns to India again in a few years, Lamb replies: "'Oh, yes you will! You may live to be one hundred.'"[67] Continuing, Lamb reflects that this was done "in a manner consistent (I believed) with American etiquette, which mandates a protest when someone states that he or she is not much longer for this world."[68] Death to her mind is something to be denied, out of courtesy, pushed out of the current picture into a remote future. She discovers, though, a different kind of etiquette in force when others reprove her. Contrary to her expectations, denying death here is uncivil, is impolite. And what about aging?

Whereas Ariès's Invisible Death model might splash across a tabloid with the hyperbolic title "No Death in America," Cohen subtitles one of his chapters in a work on aging: "No Aging in America! Leading Scientists Reveal."[69] In doing so he is not

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[65] Gawande, *On Being Mortal*, 27.
[66] Lamb, 1.
[67] Ibid., 146.
[68] Ibid.
[69] Cohen, *No Aging in India*, 47.

attempting to make a natural extension of the Invisible: He is not trying to shift to a mythical norm of the "ninety-seven-year-old who runs marathons," an ultra-healthy elderly person with no health issues in sight, let alone death.[70] Rather, with his mock title, he is playing off a sensationalized discourse which he sees as negatively impacting "a more reasonable" one.[71] In fact, the whole of the book in which this appears (*No Aging in India*) is a reaction to such a discourse as it is seen in South Asia—which, in sum, claims: "There are, or will be, too many old people in our country, or in other people's countries, and so we—the guardians of the nation, or of the welfare of other nations—must do something about this problem."[72] Here aging is seen as a problem not because it is difficult for an individual but because it is a difficulty for the country. Cohen worries about the impact that being identified as problem "may have on real people, old and less old, particularly when the arguments extend across national boundaries."[73] One reason for such a concern can be seen in the example from Lamb given above. A top-down, multinational implementation of homogenized "solutions" to the "problem" of aging might do more harm than good in a world where attitudes toward aging and approaching death are not homogenous by any stretch of the imagination. Solving problems in situations where they are not considered problems, one can imagine, might rather *cause* problems.

The view Cohen worried about remains a staple in South Asian medical literature nearly two decades after his provocative work was published. B. G. Tiwari and B. N. Upadhyay, for example, in a 2009 article "The Concept of Aging in *Ayurveda"* write:

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[70] Gawande 28.
[71] Cohan, 49. It is quite possible, though, that it would be a natural extension of an attitude that denies death. One could imagine shame at aging as well. We are very active in hiding our aging in the US. That is, the mocking title works because it truthfully, though extremely, reflects an attitude which is present.
[72] Ibid.
[73] Ibid., 4-5.

> In the first 50 years of 21st century old age dependency ratio is expected to double in more developed region and triple in less developed region, thus the age people are going to be [will be] a big problem for society. It is the best time to explore the possibility of a drug from *Ayurveda*, which can be given to the aged person and improve their life span.[74]

Age is put in terms of a 'dependency ratio', and the problem is posed as one for society rather than for individual persons. Presumably it is the dependency that is the problem, not the age in and of itself, otherwise it would not make sense to give these people a drug which would "improve their life span." For, by this definition, that would just be prolonging the problem.

In this article, it turns out that "the drug" is not a particular substance or treatment, rather it is *rasāyana* in general—a term translatable as rejuvenation therapy. More will be said about this later, but for now I will simply state that rejuvenation therapy is mentioned in the oldest ayurvedic texts and later becomes an entire genre.[75] In this article, though, the problem is framed in terms of too many people who are aging, and classical texts of Ayurveda are said to hold the solution: rejuvenation therapy.[76] Saying this is *a* drug which "affords a comprehensive physiological and metabolic restoration" is akin to saying a mechanic's shop is *the* tool which can definitely restore a classic vehicle.[77] It is an assertion of a silver bullet, a claim to have a fix-all solution. A

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[74] Tiwari and Upadhyay, "Concepts of Aging in Ayurveda," 369.

[75] For further discussion see Dagmar Wujastyk, "Medicine, Immortality, Moksha: Entangled Histories of Yoga, Ayurveda, and Alchemy in South Asia," a project description available at : *Academia.edu*. https://www.academia.edu/11543403/Medicine_Immortality_Moksha_Entangled_Histories_of_Yoga_Ayurveda_and_Alchemy_in_South_Asia.

[76] When the problem is posed as one of too many old people and the solution is rejuvenation, it seems to imply not just a making of old people healthier, but of a reverse in aging, i.e. that the rejuvenation therapy makes the old less old, as in the most literal meaning of the English word. The Sanskrit compound *rasa-ayana*, which could be translated as the path of the essential bodily fluid, holds at minimum the meaning of "a medicine supposed to prevent old age and prolong life." (Monier-Williams, *A Sanskrit-English Dictionary*, 1872, 870.) The difference lies between prevent and actually reverse what has already occurred. Whether, once one is aged, the therapy was classically believed to restore youth will be discussed more concretely further on.

[77] Tiwari and Upadhyay, 398.

sticking point, though, is that of the 40 signs and symptoms of aging they gathered from five classical texts in this study, not a single trait appears in all five, and only three of the 40 appear in four out of the five.[78] There is no consensus even as to what constitutes aging, so certainly not a single cure. A dented fender and a broken clutch cable do not require the same tools—though each does require tools. Likewise, *rasāyana* is a term that represents *therapies* rather than *a therapy*. A further issue with this study is that it never went directly to the ancient texts it purports to draw from. The intermediary of recent Hindi commentaries was used to determine what the ancient texts said. We can see, though, the idea of a one-size-fits-all drug as a homogenized solution appears in both the East and the West. Furthermore, at either end of the world, the appeal may be that a pill can be profitable and is easier to produce than a nuanced discourse.

Current writings in the field of Unani medicine also examine aging. There is a 2013 article with the exact title of the ayurvedic one above merely differentiated by an alternate term for the type of medicine: "Concept of Aging in Unani Medicine." It places the key to "prevention and management of geriatric diseases" in diet, regime, and medicine, drawing from foundational texts as in the case above.[79] The distant past is invoked again, but vaguely.[80] Individuality of constitution is noted:

> All bodies have not the same degree of innate moisture and innate heat. There is great diversity in regard to them. Every person has his own term of life. Under

[78] Ibid, 397. They use Hindi commentaries rather than classical texts themselves for gathering his information per the references. The classical texts are listed as *Charak samhita, Sushruta samhita, Astanga sangraha, Astanga hridaya,* and *Madhava nidan.*

[79] Itrat et al., "Concept of Aging in Unani Medicine," 461. Regime is defined here as massage and exercise.

[80] The *al Qānūn* is cited but references are general and vague such that both the English translation and the Urdu translation get cited at the same time for general health recommendations as if they were separate texts. A deeper exploration of the stance of the article is beyond the scope of this dissertation. However, it is perhaps worth noting that this article appears in an Ayurvedic journal, and that the names of Plato and Hippocrates which would likely be recognizable to those readers in their English versions were rather given in the Urdu, Aflāṭūn and Buqrāt. But Ibn Sina, a name more likely to be recognized in the subcontinent in this form, is given as the Latinized Avicenna.

> this view, the art of maintaining health consists in guiding the body to its natural span of life by paying attention to whatever things are conducive thereto.[81]

The assumption is that not every body is the same. Yet, because "with increasing age, innate heat and innate moisture reduced gradually," general treatment recommendations are possible, and several common food sources such as figs are given as being helpful.[82] But what is of particular interest in relation to this study is the mention of an individualized "span of life." Whether there is a concept of a set span of life or an extendable one may have ramifications for medical approaches to dying. This view will be closely examined in the texts under study and is a primary variable between Unani and Ayurveda.

Though harkening back to the classics, this Unani article also uses the vocabulary of today. Aging is defined as a "process of gradual progressive and generalized impairment of functions resulting in loss of adaptive response to stress and in increasing the risk of age-related diseases. The overall effect of the alterations is an increase in the probability of dying."[83] There is nothing archaic sounding in this description. Old age is said to cause death due to "loss of adaptive response to stress." This is an interesting choice of words because stress can imply either a merely physical/mechanical factor (as in friction) or a psychological one (as in emotional stress). The authors do go on to say that the problems of aging include those which are "physiological, pathological, psychological, economic and sociological."[84] In general, nation does not ring out as strongly in this piece; still, sociological and psychological problems as problems of the Aging bring Cohen back to mind. Cohen points out that "adjustment" has become a

[81] Itrat et. al., 460.
[82] Ibid., 459.
[83] Ibid.
[84] Ibid.

central theme in aging literature in India. Middle-aged, middle-income people reported to him:

> They themselves were tense, but their parents had a different problem, one of 'balance.' Again, one of several English words was frequently used: "He or she is fine; it's an 'adjustment' problem." From the perspective of balance, the anger of old people was at root an inability to adjust to changing times and shifting familial realities. Imbalance also connoted insanity, as it does in English, but the central thrust of the term was positional: the old person was literally no longer able to balance on the increasingly thin line between high ascribed status and diminishing moral authority in the household.[85]

So Cohen suggests old people are labeled crazy and maladjusted because their ideas of what should happen in the family do not match with those of the younger generation who are now in charge. "Crazy" eliminates taking the elder's perspective and opinions seriously. Granted the exact population Cohen may have been working with and that being considered in the Unani article may not overlap, but each shows evidence of concern with the sociological and psychological in relation to aging in South Asia.

In fact, as might be expected, family relations come up as an important factor in the literature of aging and of dying in various countries and cultural settings. Anne Allison, studying changing death practices in Japan, finds that a good death is equated with not being a burden to others.[86] Lamb, too, discovers that under the etiquette of death in West Bengal is a concern to not become a burden. She realizes that what these elderly people want is "to die while their bodies were still in good working condition. They wished to avoid the decrepitude and prolonged suffering—for both themselves and their families, on whom they would depend—that living to too great an age often entails."[87]

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[85] Cohen, 194.

[86] Allison, "Not Waiting to Die Badly," in *Ethnographies of Waiting: Doubt, Hope and Uncertainty,* London: Bloombury Academic, 2018. This is in press with a tentative release date of February 2018. I have been working from a prepublication draft provided by the author.

[87] Lamb, 146. Note that the concept of "too great an age" implies there is some age which is just the right age to die, a threshold which it is inappropriate to cross.

"Dependency" is precisely the issue in Tiwari above, the dependency ratio being the percentage of the population needing care versus those who are potential providers. Cohen, Lamb, Gawande, and others have noted that the shrinking size of Indian families leave fewer around to help. Cohen also explores counterexamples though—cases of dogged independence in the elderly. Lamb, as well, encounters a number of self-sufficient and anything but submissive elderly women.

Another view on dying and family relations comes from an article on patient-centered medicine by Seji Yamada *et al*. Working in the US with medical students from various cultural backgrounds, he finds family relationships an important theme in their personal experiences surrounding illness and death. Family impact on the outcome is repeatedly mentioned. One student, for example, states:

> I believe my grandmother's outcome would have been very different with a very different family. Basically, a family can create, make or break one's illness. I will focus in the future on what role the family may play in my patients and alter treatment accordingly.[88]

What this student captures here is that medical treatment is a joint project with the physician, patient, and family—all weighing in, overtly or otherwise. This has implications for decision making as another student writer makes clear. Medical error had ultimately resulted in the death of this his father, and he reports: "The experience has taught me the limits of medicine. I have also learned that even if end-of-life issues have already been discussed, it is still very hard for the family to carry out the desired wishes."[89] This does not necessarily even indicate that the patient and family have different ideas about death and dying, but many ideas seem more straightforward outside of an emotional and pressurized situation.

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[88] Yamada et al. "Family Narratives, Culture, and Patient-Centered Medicine," 281.
[89] Ibid.

The thin line between the will of the dying individual and those around him or her has led to caution in various legal communities regarding euthanasia. For example, a 2015 Rajasthan High Court decision against the Jain practice of ceasing the intake of food in order to turn one's attention to facing death cited, among other things, concern for social pressure. Therefore, the decision made it a criminal offense for both an individual participating in and anyone considered to be abetting such a fast.[90] In relation to the decision, Mehta, President of the Centre for Policy Research, a New Delhi think tank, states:

> Yes, there is in some cases the risk of social pressure, but the tradition itself had regulatory answers to compensate for that. But let us face it: If social pressure alone were the test of illegitimacy of a practice, almost all social institutions would be declared invalid, beginning with marriage. Where is the bright line between choice and pressure?[91]

The question between choice and pressure is a salient one, especially given some of Cohen's findings in relation to the elderly.

Cohen writes about a seeming contrast in upscale residential areas: "Despite the peacefulness of the colonies, they were the site of frequent conflicts and occasional murders [...] Articles on the violent deaths of old people sleeping alone in residential colonies appeared from time to time in local and national papers."[92] In regard to one of these reported deaths in particular, Cohen points out:

> Readers of this article questioned whether the police, family servants or the choukidar (the night watchman) might not be in cahoots with the thieves, whether such deaths were inevitable when children abandoned parents for places like America, and whether the daughter-in-law herself, conveniently alone with her *sās* without her husband present might not have had a hand in the murder. [93]

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[90] This ruling was overturned by the Supreme Court of India on August 31, 2015.
[91] Mehta, "Death and the Sovereign," *Indian Express*, August 19, 2015.
[92] Cohen, 192.
[93] Ibid.

What strikes one as odd about such cases is that with so many people about in the household an elderly person could be unknowingly murdered by intruders no one else sees or hears. And in this case in particular why there would be any need for a thief to murder a frail, elderly person who was already gagged and bound? Not making a judgment about the High Court's decision being the right or wrong one, those justices likely have read such articles and have had similar questions about these situations. In a recent High Court decision in New Mexico, concern about pressure is also cited. Justice Chavez cites the irreversibility of an end-of-life decision "if [it] turns out that the patient did not make the decision of his or her own free will."[94] No restoration could be made: The wronged party could not be brought to life again. He states he does not want individuals to have to endure pain, but fears coercion.

Mehta points to other, less compassionate, reasons why the decision against the Jaina death fast, *santhara,* may have been made. The court ruled that it was merely a religious variant of already banned euthanasia. In this respect, Mehta writes: "Nation-states and religion are the only two ideologies that both regulate and consecrate the meaning of death. This also makes them competitors. The ultimate exercise of sovereignty by the state is its claim to determine the conditions under which death is permissible."[95] We will see evidence of state involvement and family input on end-of-life care in Chapter 3.

Diametrically opposed to the desire to step out and meet death head on, assisting its approach as with euthanasia, is the desire to try any possible means to extend life. Above, we saw a commonly voiced complaint against "pointless and painful procedures,

[94] Haywood, "N.M. High Court Rules against the Right to Die," *The New Mexican,* July 1, 2016, A-4.
[95] Mehta, "Death and the Sovereign," *Indian Express,* August 19, 2015.

and final days full of fear and despair."[96] But there is a counter rhetoric to this which is represented by the recently coined phrase: the "right to try." It is a medical approach by means of legal sanction. The summary portion of a typical version of such a law, which in this case was enacted in the state of Maine in March of 2016, reads as follows:

> This bill authorizes manufacturers of drugs, biological products and devices that have completed Phase I of a United States Food and Drug Administration-approved clinical trial but have not yet been approved for general use and remain under clinical investigation to make them available to terminally ill patients. The bill does not require health insurers to provide coverage for the cost of such a drug, biological product or device but authorizes insurers to provide such coverage. The bill prohibits licensing boards from revoking, refusing to renew or suspending the license of or taking any other action against a health care practitioner based solely on the practitioner's recommendation to an eligible patient regarding access to or treatment with such a drug, biological product or device. It prohibits any official, employee or agent of the State from blocking or attempting to block access by an eligible patient to such a drug, biological product or device.[97]

This statement requires a little unpacking. First of all, Phase I is just the first of three phases which together are meant to test the safety of the drug. A drug after Phase I trials is still years away from final approval and little is known about the ramifications of its use. In February of 2015, the editorial board of the *New York Times* wrote in regard to such laws that "instead of relying on the F.D.A to move quickly, the 'right to try' law seeks to speed up access by eliminating the F.D.A. from the process entirely. Once a doctor and patient decide that an experimental drug is the right choice, the laws let them apply to the drug company directly."[98] This suggests an additional motivation for the law: an economic one. While the law as summarized above releases the doctor from liability,

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[96] See footnote 62.

[97] *An Act to Allow Terminally Ill Patients to Choose to Use Experimental Treatments*, Sec. 1. 22 MRSA c. 602-A.

[98] "Quicker Access to Experimental Drugs," Opposing Viewpoints in Context, *New York Times*, February 12, 2015.

what is left out of the summary but found in the body of the bill is that the manufacturer is also released from liability. It is released "for any harm done to the eligible patient resulting from the investigational drugs" as long as the manufacturer "is complying in good faith with the provisions of this chapter [of the law] and has exercised reasonable care."[99] The interest of the patient is in the title, the politics buried.

The Goldwater Institute celebrates the passing of this Maine law on its website with a March 31, 2016 post. It notes that Maine is the twenty-seventh state to have passed such a law and indicates it has been the main proponent of the legal movement. In the same post, it proudly points to the fact that the *New York Times* has called it a "watchdog for conservative ideals."[100] A lawyer for the institute is quoted on another occasion as saying, "we're accused sometimes of being in the lap of business," going on to say that makes him laugh.[101] Nevertheless, for a drug company to be released from liability for an experimental drug which without this law could not be put on the market for years to come, gives it a risk-free windfall. It is most definitely advantageous from a business standpoint. Furthermore, since the F.D.A. is left out of the loop, it is easier to exercise "reasonable care." For as the *New York Times* points out: "the F.D.A. has more information about the potential risks and benefits of drugs under development than a doctor or patient is apt to know."[102] Once the F.D.A. is out of the loop, the manufacturer

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[99] *An Act to Allow Terminally Ill Patients to Choose to Use Experimental Treatments,* sec. 1. 22 MRSA c. 602-A, 2016.

[100] Goldwater Institute, "Maine becomes the 27th State to Adopt Right to Try Law, accessed July 2016, http://goldwaterinstitute.org/en/work/topics/healthcare/right-to-try/maine-becomes-27th-state-to-adopt-right-to-try-law/. Note the content of this post has been dramatically changed since I accessed it. No last modified date is given. The post is still dated March 31, 2016 as if it had not changed. Per a posting cited as being added May 26, 2017 and accessed June 7, 2017, Iowa became the 36th state to have passed such legislation. Nine states were added in approximately a year. As of March 2018, the number is at 38.

[101] Lacey, "A Watchdog for Conservative Ideals," *New York Times,* December 26, 2011. http://www.nytimes.com/2011/12/26/us/goldwater-institute-an-aggressive-conservative-watchdog.html?_r=0&module=ArrowsNav&contentCollection=U.S.&action=keypress&region=FixedLeft&pgtype=article.

[102] "Quicker Access to Experimental Drugs," Opposing Viewpoints in Context, *New York Times*, February 12, 2015.

does not have as much information either; thus, they cannot be held responsible for risks they know nothing about. Not having to go through the F.D.A. eliminates the possibility of inopportunely running into such information. Additionally, when considering the fact that "the F.D.A. already has a process for helping very ill people receive unapproved treatments," one has to admit there are interests being served here beyond that of the patient.[103] Furthermore, given that information useful to the patient gets eliminated in this process, one could go so far as to say that this law actually stands in contradiction to the patient's interests.

The next logical step in bringing greater access and choice to the dying patient in terms of the present and growing pharmaceutical cornucopia, now that the F.D.A can be skipped over, is to sidestep the doctor, or to at least minimize his or her role. And that is exactly what has been done with proliferating television ads that address the patient directly in relation to health issues of greater or lesser magnitude. Most striking is one addressed to dying patients who have tried all the other available options for their particular type of cancer. Opdive sells something between survival and salvation. What I mean by that is that it is more mythical than medical in its approach. In an urban setting, a light swings across skyscrapers; sound adults (or at least those who are in no way perceptibly ill or weakened) look up to the light above as if in wonder and awe. Words become visible. The sweeping motion halts at a conveniently readable location against a skyscraper, and one sees the message as clear as a city block: "A CHANCE TO LIVE LONGER." Who wouldn't want a chance to live longer, especially when the message comes from the sky above wrapped in light like a sign from God?[104]

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[103] Turkewitz, "Patients Seek 'Right to Try' New Drugs." *New York Times*, January 11, 2015, A16(L).
[104] I first observed this commercial in the summer of 2016 after having returned from a research period in India.

There is a cost, though. Per Michael Wilkes, the Director of Global Health at U.C. Davis, that cost is "about $150,000 for the initial treatment, and then about $14,000 a month."[105] He also points out that the "longer" in the statement about living longer is on average 90 days.[106] Thus for the average person, the total cost would be $178,000. The numbers are enlightening. But as with the "right to try" legislation, patient benefits are the banner and the numbers found elsewhere, long after the message excites hope and incites action. In this case the hidden costs are literally so.

This brings us back to the question of the "line between choice and pressure." Yet the picture here is not one of pressure upon a frail and dependent parent by those who might wish to dispatch with cost and care. However, keeping Ariès's findings in mind, it could nevertheless represent strong social pressure. The "game" of denying death would necessitate continuing with treatment. (It is worth noting that the commercial opens with a presumed father and adult son enjoying a baseball game. These two, the poetics of the message tells us, are good sports.) With this in mind, turning down an available option would be an admission of death—not merely in the sense of opening a door to it, but worse yet, in acknowledging it. Pointing to death in such a manner is pointing to the hole in the mantle of perfection, what above was described as a socially construed shameful act. It runs counter to the model of Invisible Death. In that respect, not trying the drug would be an admission of failure both individually and societally. One is meant to appear fit and vibrant until the end (and in this sense, one would also be less of a burden, in theory at least.)

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[105] Wilkes Dec 16, 2015 Health News Review http://www.healthnewsreview.org/2015/12/opdivo-ads-vs-the-reality-of-stage-iv-cancer-treatment.
[106] Ibid.

As indicated above, this is not a picture of someone in a sick bed carefully making plans. It is not a picture of small gains with a known end point. It is left to the doctor being pressed for the drug to explain all that has been left out of the happy scene— efficacy, appropriateness, side effects, limitations. The doctor gets the thankless job of dimming hope, all while having to buck the previous trend of medicine to not mention the approach of death in support of the social silence surrounding it. Here the German playwright Friedrich Dürrenmatt comes to mind. In his *Die Physiker* (*The Physicists*), which explores the theme of scientific and technological advances in relation to the concept of responsibility, he writes that precisely what makes an advance useful to the public is that it has been separated from the need to understand the technical background and information. He uses the example that if we had to understand electricity when we flipped the switch in order for the light to come on, most of us would be in the dark.[107] Necessarily, most of the patients who request the drug will not have the technical knowledge to understand its full ramifications.[108] It will not be immediately apparent to them what is involved in the promise to live longer. The doctor, then, is shifted from a role involving diagnosing and healing to one of translator of technical knowledge— he or she becomes decoder rather than prescriber.

But marketing remedies directly to the patient is nothing new in South Asia. Print media shifted the doctor-patient relationship in the late colonial period as described by Attewell, Datoo and others.[109] Prescriptions that had once been closely guarded family

[107] Dürrenmatt, *The Physicists*, 22-23.

[108] In my years working in a genetics laboratory, I saw that many in the general public are not even clear on the concept of false negatives and false positives, taking preliminary and tentative results of screening tests as a definitive answer.

[109] An especially good analysis of shifts occurring due to print media can be seen in Sabrina Datoo's "Breaking Form: The Urdu Medical Periodical and its Readers," presented at *Theory and Practice in South Asia Workshop,* Sponsored by the Committee on Southern Asian Studies, University of Chicago, May 12, 2016.

secrets were openly published, and druggist were available to fill them; no physician needed. In this regard, Attewell writes: "Medical advertising and print culture was [...] an unregulated domain."[110] Advertisements could make any claims they wanted, and did. A typical claim would be: "The special quality of this medicine, and it is a great quality, is that hundreds of thin and feeble men have taken this with seers of milk and a few spoons of butter, and they became fat and revived to a state of blooming health and strength."[111] The advertisements had such an effect that an Unani physician commented in the 1910s that "the product is in the process of eclipsing the physician, the market is driving the make-up of tibb."[112] This is a statement one would not be surprised to hear today in the U.S. in response to advertisements for prescription drugs: Pharmaceutical companies are steering medicine. And the dying were not exempt in these early South Asian ads, as we see in Attewell's comments about one particular medicine and the claims made for it:

> Another prominent product of the Cashmah-yi factory was Iksir, a medicine aimed at curing disease of poison and putrefaction. The prevalence of epidemic outbreaks in the Punjab over the previous twenty years would perhaps have made it an alluring product, as it claimed to bring those who had been suffering from plague, cholera and malaria 'back from the edge of the grave to live again.'

This is another version of "a chance to live longer." Attewell goes on to state that the "target group" for the medicine included "children, youth, the aged and all the new and old illnesses of men and women; it will have a magical sudden effect at home on all complaints."[113] For Attewell, the word "sudden" has particular significance as the rapidity of western medicine was generally acknowledged and was a point where it was seen to surpass local medicines. But what I would point out is the concept of "old illnesses"; as will be seen in the body of the dissertation, old illnesses, those ones which

[110] Attewell, *Refiguring Unani Tibb,* 274.
[111] Ibid., 268.
[112] Ibid., 281.
[113] Ibid., 271.

an individual has had for some time already before meeting with the physician, were illnesses that were believed to be particularly difficult to treat. This ad is working off that common cultural belief. And it is not necessarily the case that it is not true in general, but the reason it finds its place in the ad is that it is a specific factor of importance already in the minds of these consumers, a key term. It is a generally acknowledged fact in this milieu that old illnesses cannot be cured, so this drug is a miracle drug because it does what all the other drugs cannot: it cures the incurable. Drugs which can cure the incurable will be discussed in Chapters 3 and 5.

Epidemics will also play a role in the body of this work, but sticking with marketing for a moment more, it is this kind of cultural knowledge of what is perceived as important by the consumer that international pharmaceutical companies had not understood when originally trying to sell their cures in South Asians per Cohen. In a discussion on Alzheimer's, he writes:

> The American preoccupation with senility as a disease had made few inroads in the late 1980s despite considerable efforts by multinational pharmaceutical corporations sensing a tremendous untapped market. Unlike balance, which shifted blame off the Bad Family, explicit disease models did not offer an alternative imagining of the familial body but begged the question of the family's role. They were not, at this juncture and for these families, useful to think with.[114]

These companies were trying to use a model that worked in one culture within another, but it was not one which met the needs of the later. The disease model conflicted with perceptions of social responsibility within the family. Later, companies working with a greater understanding, employed "a neuronal language synchronous with Alzheimer's to legitimate its vague model of efficacy," but also aligned the drug Dasovas with the long-standing idea of *rasāyana*.[115] The new medical language resonated with old ideas of

[114] Cohen, 199.
[115] Ibid., 220.

rejuvenation therapies from classical Ayurveda, and its substantial expense put the caring generation on the side of moral right, of doing something special for their parents. The drug becomes an offering on the altar of family dynamics. As Cohen describes it: "Dasovas's price is a marker of its transactional value within the economy of the familial body."[116] These consumers are willing to pay high prices, but the concept of its efficacy must meet their metaphors. In fact, as indicated, large price tags may make a drug all the more appealing. Along these same lines in the late colonial period, a type of ad was seen, "where a product is branded for select consumers," made up of gems and other precious ingredients.[117] Expensive drugs not meant for any old patient of limited means go as far back as the CS, and likely further. In some case an astronomical price might be associated with stellar efficacy, but the social exclusivity it affords may also be a large part of the selling point. The patient gets the sense that he matters more than the run of the mill patient.

Perhaps this is also at play in drugs such as Opdive. The "right to try" approach, therefore, perhaps ought to be renamed, "the right to buy." As stated above, as far as approaching death goes, it stands in opposition to the "right to die" stance. In it one wishes to take any available opportunities to extend life, and in the other one wishes to curtail what is left of life. Law, religion, and economics aside, each of these involves a particular medical approach. Between these two stands a third approach, one that does not have a legal moniker, perhaps indicating that there is less at stake in it financially, and/or that is it less threatening to nation-state and religious investments in the meaning of death. It is an approach that does not aim at altering the hour of death. It does not attempt to co-opt control over lifespan. Nevertheless, it is a medical approach.

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[116] Ibid.
[117] Attewell, 273.

The term palliative is the word most associated with this stance. To ease without curing requires one to acknowledge there is not a cure and to cease applying medicalized treatments as if they could cure, and rather to use the leverage of medicine to give the patient the best comfort and quality of life throughout the state of passing. This concept will be encountered in Chapter 5 and is the approach Gawande argues for in *Being Mortal*. Being a surgeon, he is speaking from firsthand experience. He writes: "We've been wrong about what our job is in medicine. We think our job is to ensure health and survival. But really it is larger than that. It is to enable well-being. And well-being is about the reasons one wishes to be alive."[118] This shifts the question of life versus death to include the act of living. For those advocating this approach, then, any medical interventions weigh particular, individual needs and desires, aiming for quality of life over quantity. Gawande goes on to state:

> Sometimes we can offer a cure, sometimes only a salve, sometimes not even that. But whatever we can offer, our interventions, and risks and sacrifices they entail, are justified only if they serve the larger aims of a person's life. When we forget that, the suffering we inflict can be barbaric.[119]

Such suffering were mentioned by Moran. But here the term "sacrifices" is a paradigm shifter. As in Moran, there is an acknowledgment of the harm medicine can cause: It is called "barbaric." (In both Chapters 3 and 5, we will see concern over the harm remedies can cause.) The word sacrifices, though, pulls the camera away from the hospital, the generic hospital doing horrific if well-intentioned things, and places the frame on the person, imbuing the individual with agency. One who sacrifices, acts—chooses. He or she gives up one thing to gain another more desirable thing. This places the ball back in the patient's court...sort of.

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[118] Gawande, 259.
[119] Ibid., 260.

There is a rub, and it was discussed above in relation to the "right to try." The patient lacks the medical expertise to know if death is impending and what the real costs are, and not simply financial ones. What treatments are available? What are the side effects? What are the chances of success? What is the definition of success? What gains can be expected and what losses do they entail? What are the alternatives? Knowing these things, both abstractly and as seen firsthand, impacts doctors' decisions in regard to their own health. Sharon Kaufman, a professor of medical anthropology, tells for example of a doctor with end-stage renal disease who chose not to undergo dialysis, "concluding that the hours attached to a machine and the treatment's side effects—including fatigue, low blood pressure, blood poisoning and muscle pain—were not worth it."[120] He knew he was going to die regardless. There was not sufficient upside to the downsides.

Kaufman finds this situation troublesome. She points out a discrepancy: "Doctors don't want for themselves what they do for their patients."[121] Why is this the case? For, given the technical and changing landscape of illness and treatments, the doctor has the most accurate shot of answering the question: Am I going to die?—whether it is for herself or for her patients. Then why do physicians not talk with their patients more frankly about approaching death—in either sense, that is, its coming or decisions about the handling of it? Some studies have cited time as an issue, other claim it is the difficulty of having the emotional conversation.[122] And, though indications are that the situation is changing, set against the golden glow of Opdive-style hope, one can imagine why it

[120] Worthy, "We All Want to Die—but Not Yet," *Washington Post*, March 7, 2016. See also Kaufman, *...And a Time to Die: How American Hospitals Shape the End of Life*, New York: Scribner, 2005.
[121] Ibid.
[122] See Neergaard, "As Patients Face Death, Doctors Push Straight Talk," *The New Mexican,* March 24, 2015, A2. Also see Luthra "Making End-of Life Plans Accessible," *Bangor Daily News,* April 1, 2016. Time, of course, here in American means money, and a significant shift is the move by Medicare to pay for such conversations as discussed in the Luthra. As per Neergaard, some physicians are now making videos of end-of-life medical procedures so the patient has a better sense of what is being agreed to or rejected.

would be difficult to have conversations about impending death. We are made to believe there is always some radiant possibility out there somewhere, about to drop from the sky. In relation to the difficulty of facing death head on, Yamada *et al.* recount a medical student's experience with a dying relative. The student described the situation as follows:

> In a desperate attempt to delay the inevitable, two educated, rational people grasped at whatever straws they could… Perhaps it wasn't just a cure that my aunt and uncle searched for outside of Western medicine. I think they sought compassion, a listening ear, validation, and reassurance that were not found in oncology, gastroenterology, or radiation therapy. I think the thing they sought most was hope.[123]

Therefore, hope stands as a powerful beacon on one end of the spectrum and immediate relief from the burden of a painful and debilitated life on the other: the right to try diametrically opposed to the right to die. Attitudes towards pain and death may be significant influences upon which route is chosen. And the less strident option that sits between these, facing death with an eye to the quality of the remaining life, is perhaps the signifier of a newly formed (or forming) attitudinal model toward death—the one represented in Ariès by the few he saw who wished to "humanize" rather than ignore death. Whatever our new stance toward death will be, it does not appear to be firmly settled. We see, as in the example above, the West actively looking beyond its borders for alternatives, inspiration, and ideas. This study too looks beyond those borders of time and place to gain a perspective on ourselves and our medical approaches to death rather than to find specific techniques or elixirs.

THE ROOT OF THE MATTER

As we have already seen, even in the globalized, mobile current era, ideas about death remain distinct. Gawande may be an American surgeon with an Indian upbringing

[123] Yamada et al., 281.

who writes about shortcomings in the Western medical approach to death *and* brings his father's ashes to the Ganges for final rituals. He is a cultural bridge. But bridges, though linking landmasses and touching ground on each side, do not eliminate the divide. Therefore, in order to answer the question of how death is handled, it is imperative to examine the nature of death in these earlier medical cultures. How is it perceived? How is it defined? One may be tempted to consider death a universal and our experiences and understanding of it universal as well. The latter has already been shown above by Lamb's well-intentioned *faux pas* not to be true. Attitudes vary over place and time, even within the same culture as shown by Ariès. Thus, universality will not be an assumption of this study, which will rather attempt to understand the nature of death as viewed from within the medical traditions at the time of particular writings, with the understanding that neither of these two traditions is monolithic and unchanging. This will, therefore, also not be a study that reaches any final conclusions about what death is in any overarching manner for these traditions. This is a glimpse and a first step. The question, then, comes down to, medically speaking, what exactly does it mean to die in Ayurveda and Unani in the texts we examine?

There is another necessary fundamental question that links the other two, and that is: How is the coming of death recognized? What are its signs? For if there is any particular handling of the dying, a doctor needs a way to recognize its approach before it arrives. Ideas of death, likewise, will inform any actions of possible revival and what they might be. Is death a line once crossed never to be returned from, or is there an intermediate state in which the patient is viewed as still possibly retrievable? And is that found in all types of death or just some? For that matter, are different types of death distinguished? For example, in our current concept of death, mouth to mouth resuscitation may work for a time when the airway has been temporarily blocked whereas

it would not be resorted to were a body found cold and stiff. One may only be drawn back from the liminal zone. Thus, putting these three questions together, one may expect *actions* to be based upon *signs*, which in turn would be related to the comprehension of *what death entails*. Examined together, these may lead to a more nuanced understanding of the actions, keeping in mind that the action may be a choosing not to act.

The secondary literature generally addresses these topics (actions, signs, and the nature of death) obliquely. Multiple scholars have noted that work on Unani has often meant biographies of hakims with more attention to their performance of the role of gentleman than to the content of medicine, or it has been studied with a view to power and patronage. In such cases, the nuts and bolts of the medicine is of interest only in so far as it informs the frame and so is primarily neglected. Alavi, for example, writes that a number of "cursory studies of medical texts" have been approached from the view of the state.[124] Furthermore, Attewell points out a fact that cannot escape the attention of anyone working with Unani, namely that studies that position themselves as being on "Indian" medicine typically have meant Ayurveda.[125] This means that those studies that try to gain a historical understanding of medicine in South Asia typically leave Unani out.

A rare exception to that trend is Judy Pugh, who reverses the standard assumption. In the article "The Semantics of Pain in Indian Culture and Medicine," she defines that Indian medicine as Unani Tibb. She reports that Ibn Sina characterizes pain both as a symptom and a disease, the excess of which can cause death.[126] His discussion

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[124] Alavi, *Islam and Healing: Loss and Recovery of an Indo-Muslin Medical Tradition, 1600-1900,* 8.
[125] Attewell, 16.
[126] Pain is an important and overt factor of consideration in Unani as opposed to in the classical texts of Ayurveda which tend not to mention it. See Selby's discussion in "Color, Complexion, and Prognosis in an Early Sanskrit Medical Manual," 6. Because of this difference between the traditions, the association of Pugh's study with "Indian Culture and Medicine" is problematic. However, I do applaud her effort to recognize Unani as a part of Indian medicine. It is worthwhile to recognize that Indian medicine includes multiple traditions.

and its relation to death will be examined in Chapter 5, but her point in bringing him in is simply to reference today's patients' experiences of pain back to his categories with which she finds concurrence.[127] For her the patient's understanding of pain remains much the same as a century ago. There is a plethora of writing such as this that mentions the classical texts in a generalized way in order to support contemporary claims and aims. These often become another sort of cursory study of the original text; the object of study is not the texts themselves but rather to act as support. This work intends to make the original texts the focus of the study, though that information will then be used to gain insight on current discourses. This is a looking elsewhere to better understand those points of time, as well as to better understand ourselves. The purpose is not to make conclusions about today and then reach into the past for support for those ideas.

TAKING ACTION

No studies of Ayurveda or Unani focus specifically on what actions are taken or not taken by medical personnel in relation to the dying person, though several have sustained discussions that deal with medical care in relation to the dying which fall under a broader focus. For example I. A. Menon and H. F. Haberman, along with others, in examining the students' medical oath that appears in the CS, note that enemies of the king, unattended women, and those "on the point of death" are not to be treated.[128] Dominik Wujastyk, in a very important, fundamental piece of scholarship in the field, *The Roots of Ayurveda,* looks at the four foundations of medicine in Vāgbhaṭa's *Heart of Medicine,* (*Aṣṭāṅgahṛdayasaṃhitā,* Ah) and records that the patient should be rich, while from the CS he points out a related recommendation that the poor should be avoided.[129]

[127] Pugh, "The Semantics of Pain in Indian Culture and Medicine," 34.
[128] Menon and Haberman, "The Medical Students' Oath of Ancient India," 296.
[129] Dominik Wujastyk, *The Roots of Ayurveda*, 209; 213.

Right from the start, then, who is considered eligible for treatment is a limited group. This indirectly affects approaches to the dying patient in that some are off the table, so to speak, right from the start; they are not even to be taken into consideration.

Another exploration of who is treatable appears in what is arguably the most important piece of secondary literature for this study: *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda.* In this examination of ethics, Dagmar Wujastyk summarizes the breakdown of those who should not be treated as: "(1) social outcasts whom anyone concerned with his reputation would wish to avoid, and (2) persons whose treatment would fail. It is the latter group that is of special interest here," she states and adds, "and in particular those patients who suffer from terminal illnesses."[130] This is also where our interests lie. Furthermore, Wujastyk goes on to consider why a doctor would not treat such a patient. She writes: "The first argument is that treatment would be futile since it would have no effect: the patient's case is hopeless."[131] This is in a sense a circular argument: You don't treat a dying patient because he is going to die. Circular as an argument or not, though, that you would not try to do something that cannot be done seems to be common sense. But we have also witnessed the pressure in present times to keep trying in spite of that knowledge. Maskarinec expresses it well in regard to the Yapese:

> Family members never want to give up hope of cure. They always want something done for the patient that is working for a cure (usually this is local medicine). Acceptance of imminent death can and does occur, despite the continuation of local medicines targeted to cure the disease.[132]

This statement presents a conundrum because cure implies at least *the chance* of solving the problem. On the other hand, if one accepts "imminent death," then one has to, to

[130] Dagmar Wujastyk, *Well-Mannered Medicine*, 111.
[131] Ibid., 113.
[132] Maskarinec et al., "Palliative Care and Traditional Practices of Death and Dying in Wa'ab," 31.

some extent, acknowledge its inescapable approach. In some cases, it could be that there is a degree of doubt that death is definitely on its way, and confidence in the degree of certainty in predicting death will be discussed in the body of this work. Another interpretation, though, is that the family understands death will come but wish to continue treatment in order to honor the dying one, to show they care.

In regard to the futility of treating the dying, however, Wujastyk does not leave that first argument hanging there. She adds, "The medical authors explain the ineffectiveness of medical treatment not merely as a result of the end of an allotted life span, but as an effect of active intervention by hostile entities," naming these from Vāgbhaṭa's writings as "Yama's messengers."[133] This statement is important for a couple of reasons. First, given that Yama is known as the King of Death or as Death itself and that these are his servants means that the patient does not just die, i.e., go to death, but that death can actively come to collect him. One can imagine why a doctor would not want to be at cross purposes with Death envisioned in this manner. It would be a hard tug of war to win. The idea of an "allotted life span" is also significant. Lifespan and whether and in what ways it is fixed in Unani and Ayurveda will be an important theme in this dissertation precisely because it can impact ideas about treatment of the dying as well as flesh out the conception of the nature of death.

She goes on: "The second argument or explanation pertains to the consequences failed treatment would have for the physician," and she quotes from the CS, which states: "If a physician were to treat an incurable disease, he would inevitably suffer the loss of wealth, knowledge, and renown and would meet with censure and rejection."[134] Loss of wealth and renown are understandable if a physician is seen to fail, but I am not quite

[133] Dagmar Wujastyk, *Well-Mannered* Medicine, 113.
[134] Ibid.

sure what the mechanism would be behind a loss of knowledge. The Greeks, though, appear to have had a like resistance to treating someone on the edge of death, at least as far as is seen here in the *Republic: "*They claim Asclepius was a son of Apollo but was persuaded by money to heal a rich man at the point of death, for which he was struck by a thunderbolt."[135] Here the physician loses more than wealth and fame: He forgoes his very life. Furthermore, his motive is not compassion or even hubris, but money—which we can see here is culturally assumed to be a punishable motive.[136]

In respect to hopeless medical cases, then, there arises the question of what makes it hopeless. How is that determined? Both Dominik Wujastyk in his *Roots of Ayurveda* and Dagmar Wujastyk in *Well-Mannered Medicine* discuss the breakdown of disease into the most basic categories of curable and incurable and the fact that the doctor is supposed to "abandon" the incurable.[137] Mazars also mentions: "It is not advisable to persevere in prolonging the life of a patient who has reached the end of his life," citing the same reason of damage to the doctor's reputation.[138] But he also adds that there is a proverb which depicts abandonment by one's doctor as the ultimate abandonment. From this he concludes that it must have been a fairly common practice in ancient India to do so.[139] There was a cultural recognition that the dying patient would not be treated. Honigberer writing in the early-mid 1800s mentions severely ill people left on the bank of the Ganges. If they recovered, they were said to wander down stream and interact and marry only among themselves.[140] Even if the meaning to be taken is that dying there had greater

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[135] Plato, *Republic,* Translated by R. E. Allen, 99.
[136] In classical Ayurveda, money is an important factor in treatment—a physician is looked down upon for seeking it. See Olivelle "The Medical Profession in Ancient India."
[137] Dagmar Wujastyk, *Well-Mannered Medicine,* 110-116; Dominik Wujastyk, *The Roots of Ayurveda,* 13.
[138] Mazars, *A Concise Introduction to Indian Medicine,* 87.
[139] Ibid.
[140] Honigberger, *Thirty-Five Years in the East,* 187.

benefits than an extension of life anywhere else, "left on the bank" also presumes that in that time and place abandonment of the critically ill was still a practice.[141] It implies one was not lying on the bank being treated just in case one would live *and* located precisely there in case one would die. One was still abandoned, medically and socially even. Unfortunately, "abandon" (*lavaris)* is the common name of a hospital ward in Patna which serves poor patients without families—who from all reports sound to be nearly as fully abandoned as those who were left by the river.[142]

Menon and Haberman, again focusing on the oath section of the CS, quote it as saying "Thou shalt not desert or injure thy patient for the sake of thy life or thy living."[143] (Selby notes the Christianizing tone of this translation.)[144] Based on this, they claim that the patient's welfare comes "above any personal consideration of the physician."[145] This leads one to assume that the welfare of the patient would come before the physician's reputation and therefore to contradict the above. In a text as large as the CS which has passed through many hands in preservation and restoration, not to mention that it may have been a compilation from various sources at the start, to *not* find contradictions would be the surprise. But here another interpretation may be possible. For one thing, both Wujastyk and Selby point out that this oath is one which is meant for *students.*[146] It is modeled after a brahmanical initiation ceremony. As Selby notes, the injunction of observing *brahmacarya* (celibacy) found here (at CS. Vi 8.13) likely pertains only to those healers while they are in the learning stage. Thus, other parts of this oath may be

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[141] See Parry, *Death in Banaras,* 1-32 for a discussion of the sacred geography of that city and 30-32 specifically about the value of dying at this location on the Ganges.
[142] Biswas, "A Messiah for India's Abandoned Sick," *BBC News,* February 14, 2016.
[143] Menon and Haberman, "The Medical Students' Oath of Ancient India," 295.
[144] Personal communication.
[145] Ibid., 297
[146] Dagmar Wujastyk, *Well-Mannered Medicine,* 12; Selby personal communication.

student specific as well. Or, at the least, the emphasis might be different for students. There may be an assumption that what one new to medicine needs to hear and do differs from that of the seasoned physician.

Along these lines Dagmar Wujastyk warns that, though general advice is given about whom to treat and whom not to treat, the decision-making picture is more complex. An example she gives is from Vāgbhaṭa in which it is said that a morally upright person with a "terminal prognosis" may be treated.[147] She quotes him as stating: "Isn't it so that someone who is virtuous and whose life span is fixed will live? Therefore, a physician should treat the patient with care up to his last breath, having informed and obtained the permission of his family and friends."[148] Here the idea of a fixed lifespan comes up again in the context of Vāgbhaṭa, and the moral element is explicit (though the phrasing "right up to the last breath" indicates that perhaps some of these who are expected to rally because they are virtuous, in fact die, and are recognized to have the potential to do so.) The physician's taking "permission" from the family and friends to treat this type of dying person is noteworthy. It implies the standard state would be that a family would not want or would not allow a dying person to be treated in spite of physician recommendations. Did this attitude drive the physicians to a position where they would abandon dying patients, or was the force moving in the opposite direction so that it became the socially expected norm? This is an open question, worth investigating from beyond the realm of medicine.

Dominik Wujastyk explores the concept of a fixed lifespan in the CS, which shows a different picture than found later in Vāgbhaṭa's writings. In the earlier text the concept of a set term is found problematic for a host of reasons, such as if that were the

[147] Ibid., 112. From Vāgbhaṭa's Ah.
[148] Ibid., 113.

case no one would ever be able to be successful in poisoning someone because the lifespan would be fixed. (This would work just fine in with a creator god who builds this into the master plan, but without a concept of a master plan it is problematic.)[149] Another example given is that if lifespan was fixed "it would not be necessary to avoid mountain precipices, nor rough, dangerous rapids."[150] Preventable accidents would be impossible (at least for the virtuous). In short, the category of timely and untimely deaths would not exist if lifespan was predetermined: every death would be happening at the right time. But perhaps the most important reason, if such were the case, would be that then "the wise masters could not use austerity to achieve whatever life span they wanted."[151] A view of a predetermined lifespan would interfere with religious beliefs and practices. This appears to have been a commonly held view, that lifespan was expandable via personal effort. Leslie reads it this way, arguing that "Caraka strongly emphasized that health and disease are not predetermined and that life may be lengthened by human effort."[152] However, even here we see it is a contested view as we are told by the CS that "some people" do believe in a fixed, predetermined lifespan.[153] And the fact that the discussion of the topic ends with the forceful statement, "We teach it correctly. We see it correctly," leads me to believe that it was not just contested but strongly so.[154] If one is allowed to treat a terminally ill person who is virtuous on the grounds that his lifespan is fixed so will not be ended by this presumed interruption, then the above argument which weakens the concept of a predetermined span also weakens the justification for treating the terminally ill who are "the good." In the minds of those medical practitioners who did

[149] Dominik Wujastyk, *the Roots of Ayurveda,* 45.
[150] Ibid.
[151] Ibid., 46.
[152] Leslie, *Asian Medical Systems: A Comparative Study,* 22.
[153] Dominik Wujastyk, *The Roots of Ayurveda*, 45.
[154] Ibid., 46.

not believe in a predetermined lifespan variable from individual to individual, what a "normal" human lifespan would be, or whether there was a "normal" span at all will be treated below under the nature of death and concepts of mortality and immortality.

Susan Sontag who has written on the moral component of health in the West has noted: "For Homer disease can be gratuitous or it can be deserved."[155] This is a point of view that could help explain why good people get fatally ill, but not one that appears to have been employed in Ayurveda. But what she calls modern "psychological theories of disease" comes closer to the morally invested Ayurvedic point of view. Sontag writes: "Widely believed psychological theories of disease assign to the ill the ultimate responsibility both for falling ill and for getting well."[156] Clearly there is the idea that one's behavior impacts one's health in Ayurveda, though the second half of this statement is more fitting to Unani. There the Hippocratic notion of nature as the physician of disease, which in Latin becomes *vis medicatrix naturae,* is present in the concept of the doctor as simply assisting the body (as a piece of nature) to heal itself—a concept we will encounter in Chapter 5. Rahman explains it thus: "According to the Greco-Arab medicine, the purpose of medicine is to assist natural recuperative power, and to eradicate the disease from the human body."[157] Hamdani describes the physician's role as developing the power of self-preservation.[158] Preservation will be seen to be an important concept in this medicine and will be discussed further in the body of the dissertation. What is to be noted in relation to the current conversation is that support is a mode of action.

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[155] Sontag, "Disease as Political Metaphor," 5.
[156] Ibid., 2.
[157] Rahman, "The Heritage of Unani Medicine," 20.
[158] Hamdani, "The Basic Principles of Unani Medicine," 75.

SIGNS

Because Dagmar Wujastyk's frame is ethics, she considers the decision to treat or not treat in that light. She writes:

> To begin with, a physician's decision not to take up or give up a patient's treatment is meant to be informed. Since he is ideally meant to know all there is to know about disease and cure, his assessment of any medical situation should be accurate, and he would therefore only reject cases for which there exists no cure. His appraisal is based on a complex system of (1) specific signs that warn him of the patient's impending death and (2) disease classification.[159]

We have already seen above that disease classification, namely the classification of a disease as incurable, can be set aside in certain circumstances; it can be qualified by moral standing. Are signs also tied to morality, either in the sense that, as with disease classification, being a good person can override a bad sign, or in the sense that the sign itself carries a moral face? It may help here to consider a dichotomy Wujastyk observes in the medicine in regard to treatment procedure. She explains:

> When a physician decides not to accept a patient or to abandon him on the basis of these signs, the decision is in some sense personal: the *patient* is incurable and therefore must be avoided. However, the classical medical treatises at the same time offer a depersonalized discussion in which not the patient but the *illness* is categorized as curable or as incurable. In line with their conclusion regarding the signs of impending death, the medical authors generally warn not to treat incurable diseases.[160]

This observation occurs within a discussion focused specifically on signs of death. The point she wishes to make is that at times the medicine focuses on disease without any immediate consideration of the person attached to that disease while at other times an action appears to be directed at the individual. The advice is to drop the patient rather than to steer clear of that disease. It is interesting to note here that the personal appears in the context of signs and the impersonal in relation to disease categories. Does this matter?

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[159] Dagmar Wujastyk, *Well-Mannered Medicine*, 111.
[160] Ibid., 112.

This split of the personal and impersonal seems at first to suggest the possibility of a divide of the biological and the moral into two different worlds, two different spheres of medicine. However, Langford and Parry both describe the body as a biological and moral complex, she in the context of her work on bodies in Ayurveda, and he in regard to Hindu postmortem practices. Langford in describing the fluidity of the body writes: "The dosic body bears the imprint of a social matrix, the somato-psychic consequence of living with or against dharma."[161] As a result of such fluctuations, Langford laments that this type of body "bears more resemblance to a weather pattern than to a biological entity," notwithstanding nature in all its movements remains impartial and amoral.[162] Where Langford brings the bio and the moral together, Parry fuses them, at one point describing the body as a "transformable bio-moral substance."[163] He finds the lived understanding more nuanced than this, but describes this theoretical state as follows: "Substance determines conduct; conduct modifies substance."[164] Neither operates independently of the other. Both these scholars, however, are looking at South Asian conceptions of the body as expressed in the world today. Cerulli, on the other hand, investigates the type of personal/impersonal split identified by Wujastyk in the same early medical texts.[165]

Cerulli notes that "the body in Āyurveda is generally treated as a purely anatomical mechanism, isolable from the person to whom it belongs."[166] He also states that the standard medical approach is one that uses "diagnostic reasoning rooted in observation, which seeks first to discover and subsequently to explain the underlying

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[161] Langford, *Fluent Bodies,* 141.
[162] Ibid., 142.
[163] Parry, *Death in Banares,* 114.
[164] Ibid., 113.
[165] Both *Well-Mannered Medicine* and *Somatic Lesson* were published in the same year, 2012. I am not making any claim here about which idea came first in time by placing them in this order in my discussion. Furthermore, though there is similarity, they are not expressing exactly the same concept.
[166] Cerulli, *Somatic Lessons*, 4.

causes of a disease."[167] Cerulli equates this with the approach of modern western medicine, and terms it “chart talk.”[168] He contrasts this with narratives that appear in the same texts with this chart talk but which he describes as “decidedly different in structure, language, and history."[169] One example is a story about a wasting disease, which literally translated, is called king’s disease. Cerulli excerpts this telling of a tale from the CS: “It was about King Moon and the vice of sexual indulgence. King Moon did not take care of his body because he was completely addicted to the constellation Rohiṇī. His semen wasted away, and his body shrunk.”[170] The tale goes on to say that the disease came down from the heavens to afflict mankind. So in this view of the medical texts the impersonal are the medical descriptions in general, and the personal is a kind of genre within a genre. Suprahuman beings are the personal aspect rather than individual patients making an appearance. It is by transfer that we know since the disease exists among men, this moral aspect must be here as well and be the cause. He concludes that “Āyurveda's narratives are a distinctively medical type of socioreligious, or dharmic discourse, that is concurrently descriptive and normative. Their very occurrence suggests that medicine in classical India was used sometimes as an instrument for socioreligious instruction and control."[171] He also argues that these stories, so strikingly different in tone from the text in general, come in from other genres and are adapted to the medical setting. This begins to sound like the veneer that Zysk described as mentioned in Chapter 1. The grafting could possibly account for what Cerulli sees as the reception of these narratives by practitioners today, namely that they tend to be ignored.[172] However, that could have

[167] Ibid.
[168] Ibid.
[169] Ibid., 5.
[170] Ibid., 107.
[171] Ibid., 11.
[172] Ibid., 5.

more to do with more recent conditions, such as trying to make a medicine that seems more in line with modern, Western biomedicine. For grafts onto trees that take, generally bear fruit. By this I mean that once something was grafted on or attached as a veneer, it does in a sense become part of the medicine, start to be what the medicine is. Later on others may not even notice the seams.

Datoo's recent work has distinguished just such a seam in Unani medicine; that is, she discerns both a chart talk and the development of a narrative strand. She finds the chart talk to be the primary approach throughout the history of Unani and Tibb, i.e. inside and outside of South Asia, and the narrative to come in at the end of the Mughal period.[173] She marks the chart talk of the medical establishment reflected in Ghalib's letters, for example, "Now I have started a bout of pain in the chest. The pain starts up, lasts for twelve hours, or eighteen hours, or six hours, and then goes away."[174] She finds this to be akin to classical Unani in that "like descriptions in medical cases, they are quite succinct, they dispense with symptoms very quickly and the object of attention is a disease entity, a fever, chest pain that is endowed with a kind of agency independent of the ill person. The internal economy of this disease entity is suggested by its temporality, by enumerating the critical days in Galenic or Hippocratic fashion."[175] The shift she perceives makes its appearance in medical journals which feature question and answer columns. These start out in the classical manner, but slowly what Datoo terms the "ill voice" comes in, such that by the early 1900s the descriptions of illness are no longer brief but "were more likely to narrate suffering over the span of their whole life, shifting the analytical object of clinical conversation from the disease entity to the medical

[173] Datoo, "Breaking Form: The Urdu Medical Periodical and its Readers," 3-8.
[174] Ibid., 8.
[175] Ibid., 9.

subject."[176] The voice shifts to the first person and moral considerations make an appearance. One writer who basically has a question about a problem with a wound in his nose tells of his "inappropriate behavior" in his youth and chides himself for continued "shameful deeds."[177] So once again, we see that when an individual comes in, when a patient is in view, that person's moral conduct also becomes a part of the conversation. But have we really settled the question of whether signs themselves have a moral bearing?

What comes to mind here is Selby's work on conception and gender in ayurvedic medicine, and color. She notes the relationship of the colors red and white: "In general, white always predominates, with red and other colors ranked below it. White is the color of coolness, celibacy, virility, purity, and goodness whereas red represents heat, sexuality, permeability, taint, and energy."[178] Furthermore, red is female, and white is male. These color associations, as Selby points out, come from association with the blood and semen seen as the male and female contributions to a fetus. In thinking about Ayurveda's avoidance of symmetry, she points out that a perfect balance of the male and female contributions at conception is said to lead to a hermaphrodite.[179]

But what does this examination of birth have to do with death, you might ask? We see above that colors occur in hierarchy and that white dominates not just in some aesthetic or even practical sense, but color is tied to morality in that white is "goodness" and red is "taint." This is interesting given Selby's observations about the signs of death in the CS. These signs are given first as they relate to the sense organs, and then beyond normal perception, such as dreams. But the order in which signs are described is

[176] Ibid., 24.
[177] Ibid., 19.
[178] Selby, "Narratives of Conception, Gestation, and Labour," 261.
[179] Selby, "Color, Complexion, and Prognosis in an Early Sanskrit Medical Manual," 5.

significant. Selby writes: "Cakrapāṇidatta tells us that the subjects in this particular book [the *indriya-sthāna*] are arranged in the order of their conspicuousness, and the fact that the complexion—literally, one's *varṇa* or color—is the most conspicuous is the factor that gives it its importance and hence its priority."[180] Now no explicit moral value is attached to the skin tones one might see, but we must recall that the moral implications of the colors of red and white are not mentioned every time they appear; nevertheless, the ranking would be apparent to the reader. This does not prove that the signs of illness, and most particularly of death, carry an implied moral weight, but it suggests the possibility. In this section of the CS dealing with death (the *indriya-sthāna*), the human body is described as flowering into death, and Selby captures the thought of this poetically: "Death is forced outwards for all to see, as it must be before a prognostic language can be forged for it."[181] And what is it that we see?

Signs can be what we normally think of as symptoms, that is, physical expressions of the illness in and on the body, visible or inferred. They can also be environmental, exterior to where in the West we circumscribe the patient and thus the presence of the illness. An example Selby gives of this type is a lizard's chirp signifying death.[182] Non-visible, non-tangible signs exist, such as dreams as mentioned above, which we also do not normally associate as having implications for physiology. The location and the scope of the signs tell us something about the understanding of health and of the body, the latter of which has been well explored in the scholarship and will not be reviewed here. However, it is worth pointing out that the categories of signs, not surprisingly, bear a resemblance to ayurvedic etiological categories. That is, the manner

[180] Ibid., 3.
[181] Ibid., 9.
[182] Ibid., 1.

of categorizing the indication of the disease sees some parallels in the categorization of causes of disease. What points to the cause can share general categories with the cause itself. I say "can" because Dominik Wujastyk in his "Models of Disease in Ayurvedic Medicine" points out that various disease models may coexist within a given text. One model which is found in the SS and has parallels to signs, he summarizes as containing causes from "body, environment, and the supernatural."[183] Here we see a breakdown into inside, outside, and other just as with the type of signs above. Humors, for example, fall within the bodily causes of disease, and time comes under the supernatural. The latter type of diseases are described as "ailments set in motion by time, such as exposure to seasonal extremes of temperature."[184] (We will see this concept of ailments most particularly, but not exclusively, in Chapter 4.) In regard to this, Zimmermann states that "the seasonal cycle thus provides a conceptual framework within which the etiology of disease can be explained."[185] That the passing of time is not linear is seen in the SS as well, for Wujastyk notes that in that text "the cyclic concept of the years rolling by" is called "the Wheel of Time."[186] Time becomes interesting in relation to death when and where life might be considered as certain span, *x* number of years to be ticked off.

Terminology linking time and death will be explored further in the body of this work, including, of course, the Sanskrit word *kāla*. The joining of the concept of a normal span or duration for life with the concept of time as cyclical has potential to complicate the sense of possibilities for duration. If aging represents a certain position in a term of a duration, can a living being be pushed back against the grain of time and into another segment of life? The Islamic concept of life is of an individually predetermined,

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[183] Dominik Wujastyk, "Models of Disease in Ayurvedic Medicine," 15.
[184] Ibid., 16.
[185] Zimmermann, *The Jungle and the Aroma of Meats*, 3.
[186] Dominik Wujastyk, "Agni and Soma: A Universal Classification," 358.

unalterable span: It is god-given. Unani makes no attempt to tag years onto the end of that (linear) term. However, life in that realm of medicine has been described by scholars as a wheel. In a recent article on aging, or rather on anti-aging, we are told:

> Health is totally depending upon three faculties, which maintain the *Hararte Ghareeziya* and regulates the all functions of the body. Basically life is a wheel which is composed of three spokes (faculties) i.e. *Quwwate Nafsaniya, Quwwate Tabie'yya* and *Quwwate Haiwaniya.* When disturbances occur in these three faculties it leads to degenerative changes and finally end of life.[187]

Quwwat is what is being used here as faculty, and "*e"* the izzafa construction connects the term faculty with the word that follows, these being the psychic (*nafsaniya*), physical (*tabie'yya*) and vital (*haiwaniya*). What is fascinating here is that life, being equated to a wheel, bears parallels to the earlier South Asian view of time as a wheel, and so cyclic and related to life, as well as the emphasis on three spokes. But time may not be what is at play here. What come to my mind when I hear the conjunction of wheel and life in an Islamicate context is the concept of the celestial spheres which in the Urdu-Persian poetic tradition act like millstones wearing down the life below them. However, the Urdu term being used by Alam and his colleagues of what is maintained by these three faculties is *ḥarārat-i g̲h̲arīzī,* innate heat.[188] A phonetic neighbor of the word is *haraṭ,* which is the Persian waterwheel, a wheel with spokes and attached earthenware containers circling round and round.[189] The resonance would evoke the meaning of the phrase as innate waterwheel. This poetic image would join the three spokes of the faculties in a function of not only maintaining body heat, as explicitly stated, but as maintaining a balance of fluids as well, constantly being dropped off and replenished. It also recalls an image seen

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[187] Alam, Ahmed, and Hai, "Geriatric Care and Concept of Anti-Aging in Unani," 1.
[188] The author only gives the terms in transliteration and without diacritics, leading to some ambiguity.
[189] For descriptions of various ancient waterwheels and associated technologies, see Yannopoulos et al. "Evolution of Water Lifting devices (Pumps) over Centuries Worldwide," *Water* 7, no. 9 (2015): 5031-5060.

at the start of CS, the *tridaṇḍa*, a device with three sticks joined to hold up a water pot which is equated with life.[190] In fact, *haraṭ* comes from Sankrit *ara-ghaṭa* (literally, spoke-pot, a mechanism for raising water from a well) via Hindi *rahaṭ.*[191]

Why does this matter? The poetic resonances, though intriguing, are less important than the consideration of these faculties as a cluster of three. The humors in Ayurveda are both a substance and faculty. So here in each case we have a set of threes implicated in the basic support and function of life. Wujastyk argues, though, that the three humors of Ayurveda really represent at 2+1 system with wind being added on only later. He links agni and soma with bile and phlegm, and in regard to the clustering of the three writes:

> The *tridoṣa* theory is not present in the earliest Vedic literature of India. But the binary opposition of of [sic] Agni and Soma is as old as the oldest Indian evidence we have. […] It seems possible, then, that the combination of wind with the hot/cold humors is a specifically Indian, and specifically post-Vedic contribution.[192]

He says specifically Indian because he posits an Iranian version of the two humors which is what initially finds its way to India and Greece. This suggests a Central Asian birth for the root of the concept. This matters because an enduring question in the relationship of Greek, and hence Unani medicine, to Ayurveda is why one group has a set of three and the other a set of four humors. Looking at the three faculties and four humors in Unani in Chapter 5 will be found to support and supplement Wujastyk's claim.

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[190] I have written about this image in "Shelters of Life, Bars to Death: The *Tridaṇḍa* as a Simile for Life in an Early Sanskrit Medical Text." Paper presented at *South and Central Asia Fulbright Conference*, Jaipur, India, 2016.

[191] Monier-Williams, 86; Platts, 609.

[192] Dominik Wujastyk, "Agni and Soma," 365. Selby's recognition of Ayurveda's antipathy for symmetry will also be of assistance here. See her discussion of "dangerous symmetries," page 5, in "Color, Complexion, and Prognosis."

Returning for a moment, though, to the concept of time, we see that Mazars characterizes time in the philosophical system of *Vaiśeṣika* as "the cause of the production, preservation and disappearance of all things," going on to argue that "this conception is attested in the medical literature."[193] He sites in particular the *Hārītasaṃhitā*, and gives his translation of *āyus* not only as "duration of life" as we have seen before, but also as "vital time."[194] The medical link between time and life/health leads deaths to be described as 'timely' or 'untimely', as alluded to above. A timely death would be one where the person has lived out his or her lifespan to advanced age, and the untimely when accident or illness cause someone to die at a younger age, what we might call an early death. This manifests in the current discourse on aging with the concept of premature aging. Devi and colleagues in "A Critical Review of the Concept of Aging in Ayurveda" write:

> Aging is considered as a disease that may be manifested timely or untimely. Therefore, a detailed description regarding the prevention, maintenance, and treatment of aging has been given. Some of the measures that have been advised can be followed and some cannot. However, we can follow some practical principles and make aging comfortable and disease-free.[195]

It is difficult for me to see, if aging is defined as a disease, how aging could ever be made "disease-free", but that contradiction aside, what would prevention of aging represent? Is this a concept of potentially endless expansion of the life term? This is a question we will return to in considering the nature of death in these traditions.

Mazars's description of time as linked to continuation of life as "vital time" is striking. Breath is commonly thought of as life's vital principle. For in the discussion of Unani faculties above, the vital faculty, "*Quwwate Haiwaniya,*" derives from the Arabic

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[193] Mazars, *A Concise Introduction to Indian Medicine,* 28.
[194] Ibid.
[195] Devi, Srivastava, and Dwivedi, "A Critical Review of Concept of Aging in Ayurveda," 516.

hawa', air or wind, with cognates in Persian and Urdu. What is vital in that vital faculty is the air or breath. On the ayurvedic side, Sanskrit *prāṇa* is vital air. Selby links life and death around the word *prāṇa*, for pointing to the CS chapter on signs of death, the *Indriya-sthāna,* she observes: "Sanskrit commentators explain that the word *indriya* is derived from *indra*, an old synonym for *prāṇa*, or 'vital breath.'"[196] Zysk links time and breath in his article "The Bodily Winds in Ancient India Revisited." He argues that the rising and the setting of the sun was the first metaphor used to understand breath, which was associated with the rising and falling of the chest.[197] Since respiration and life were synonymous, tying breath to the sun therefore ties life not just to upward and downward motion, but to cycles. Time, and in particular cyclical time, enters the medical picture. Satinsky, in a 2015 article arguing that elements from Buddhist and Jain cosmology influenced brahmanical cosmology rather than the other way around, explores the Jain concept of upward and downward moving time.[198] Here again, through this breath-like motion, the link of respiration and time is felt. Much more will be said of breath later on, but for now it can be said that concepts of breath and time in the Buddhist and Jain traditions would be worthwhile areas of research. At the moment, though, more needs to be said of signs.

Important secondary literature exists on non-medical signs in South Asia that has bearing here. While exploring the semantic development of *padá* in the Vedic period George Thompson writes:

> The value of passages in which the term *padá* is attested referring to the use of tracks in a variety of divinatory and magical practices is that they show clearly the

196 Selby, "Color, Complexion, and Prognosis," 1.
197 Zysk, "The Bodily Winds in Ancient India Revisited," 107.
198 Satinsky, "What can the Lifespan of Ṛṣabha, Bharata, Śreyāṃsa, and Ara tell us about the History of the Concept of Mount Meru?" 5. Note: when I speak of respiration in this context, I mean breathing as witnessed from the outside of a body, not in the modern sense of an intake of oxygen which is circulated.

> recognition of the literal footprint as an indexical sign that refers to its maker. They show recognition of the literal footprint as a message-bearing mark of its maker, a mark that is capable, like the cry of an owl or of a śakúna, of speaking or singing to us.[199]

The sign shows its maker, its cause. What is important to us about this statement is that it shows the way signs link the visible to the invisible; that is, the existing mark points to what is not able to be seen—invisible in this case because the creature who was its maker is no longer there. Along these lines Thompson relays an anecdote of a conversation between a Buddhist monk and a Greco-Bactrian king. The king wants to hear how the monk can know the Buddha if he has never met him. The monk says that seeing the footprint of an elephant you can tell how great in size he must be.[200] Thus tracks illustrate the past present, i.e., they show now what was present at a particular place at some previous point of time. But tracks do not just show the past, they show the future. They do this because tracks are signs which not only indicate what *thing* had been at that place but also show the *direction* in which whatever it was was headed. Thompson uses, in addition to the example of bird tracks, the wake of a ship. This kind of sign is especially difficult to work with because it rapidly vanishes.[201] An understanding yielded from signs of the invisible and the passing was considered a remarkable achievement, as Thompson relates:

> Knowledge of the procession of the months and the other units by means of which time is measured was surely considered a special knowledge – a science of intangible or fleeting things, just like the course of winds. We can readily see why a god, or a priest for that matter, who has mastered such esoteric sciences would seem to be omniscient: these sciences require the interpretation of the signs of invisible, or at least transient, things.[202]

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[199] Thompson, "The Pursuit of Hidden Tracks in Vedic," 15.
[200] Ibid., 18-19.
[201] Ibid., 13.
[202] Ibid. 13-14.

Thus, an understanding of time employed the same skills as reading footprints, though extrapolating further. "Knowledge of a procession of the months," as Thompson points out, means a knowledge of circuit. Tracks show not only what was on the road, but the course of its travel—be it a bird or boat or seasons—*and* larger patterns in that course of travel. In that sense, a mark literally holds information about the future.

This has ramifications for disease. For one thing, signs can indicate death as a destination. Thompson, referring to *Ṛg Veda* (RV) 10.165.3-4, states: "The clawmark (*padá*) which the pigeon leaves behind in the ashes of an extinguished fire is feared as ominous, dangerous, signifying death."[203] Foretelling easily translates into prognosis: If there is a sign, then the direction or course should be determinable. The sign contains within it the answer to the question: Where is this disease headed?

The companion to direction is entity. What is the *thing* that left this mark? In the case of a stick hitting an arm and making a bruise, the cause is plain and straightforward. But the causes of diseases are not all so clear. Zysk points to Vedic period beliefs, stating: "Determining the cause of one's affliction was accomplished, rather, by isolating and identifying dominant and recurring symptoms, many of which were considered to be separate demonic entities."[204] Though he believes that for the most part Ayurveda developed in a heterodox setting, here he remarks that "this technique, unique to Vedic medicine, exhibits a strong emphasis on observation and may mark the beginnings of empiricism and the Indian penchant for classification."[205] This is still far from the medicine of the CS, yet these tracks appear to have left an enduring mark.

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[203] Ibid., 14.
[204] Zysk, *Asceticism and Healing in Ancient India,* 15.
[205] Ibid.

But these tracks may have more to tell us than about the formation of ideas of etiology and nosology; they may supplement our understanding of why doctors do not treat the dying. Jamison and Brereton, in their introduction to the first funeral hymn in book ten of the Rig Veda, talk about a path which leads to the land of the dead, home of Yama and the forefathers:

> […] a newly dead person makes his way along the *pitṛyāna* or 'way of the forefathers.' Because he was the first to die, Yama discovered this path and blazed the trail, as it were, to the pleasant, well-watered (vs. 9) pasture-land (vs.2)
>
> The hymn falls into three parts. Verses 1-6 offer praise to Yama as the pathfinder to the ancestral world (vss. 1-2) and then invite him to attend our sacrifice along with others, both gods and ancestors—suggesting implicitly that the *pitṛyāna* is a two-way street.[206]

So Yama has not only traveled this path; he found it. Presumably he has some especial tracking skills. And we see that it is not a one-way street. He is at liberty to go back and forth. Thus, as Thompson describes a later funeral hymn in book ten, no. 18:

> In st. 2 the relatives of the deceased are required to 'erase the footprints of death' (*mṛtyóḥ padáṃ yopáyantaḥ*), as they leave the funeral pyre to return to everyday life. The hope is expressed in st. 3 that death will thereby not follow them as they return home, to dancing and laughing (*nṛtáye hásāya*) and to a very long life (*drā́ghīya ā́yuḥ*).[207]

The question is why the relatives need to efface these marks. And Thompson responds that there is concern "that death may thus pursue the living."[208] He attributes the emphasis on both finding and concealing tracks here only partially as due to the fact that hunting and being hunted were a part of daily life. Regardless, death appears to be an efficient hunter, using not merely a known road, but tracks that lie along it. Thus they erase they tracks so death will not backtrack.

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[206] *The Rigveda: The Earliest Religious Poetry of India.* Translated by Jamison and Brereton, 1390-91.
[207] Thompson, "The Pursuit of Hidden Tracks in Vedic," 15.
[208] Ibid.

Thompson, Jamison, and Brereton have pointed to reflections of this act of revealing and concealing in the poetry of the RV itself, as have others. Thompson claims: "This theme of the hidden track, whether literal or otherwise, is one of the most conspicuous features of all RV attestations of the term *padá."*[209] He goes on to state: "What distinguishes a powerful from a mediocre hymn is the message which it guards, the meaning behind its words: in fact, its *padá."*[210] Jamison and Brereton enumerate common modes of obscuration employed in the first funeral hymn cited above, stating one can see "unidentified referents," "numerology", and "manipulations of names of meters."[211] Of the funeral hymn just prior to the one which calls for "effacing the footprint of death,"[212] they comment: "All in all, the two verses seem deliberately and cleverly designed to mislead and confuse."[213] The poem obscures its own steps in the presence of death.

When I think of carefully guarded secrets in Ayurveda, and Unani as well, I think of the remedies held closely in family lines, and the question of what else might be obscured in these lineages is a good one to keep in mind. However, here it is life that is being concealed. Death has taken one member of the community, and there is a desire to limit what could get out of hand. At the site where death has been invited to come act as a guide and lead away the dead one, there is fear that death might swell his entourage by picking up some who are still among the living. Jamison and Brereton note that in this hymn 18, where tracks are covered over, that verses 5-6 express a distinct concern about "the orderly sequence of life and death, in particular the fear that the younger will die

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[209] Ibid., 11.
[210] Ibid., 27.
[211] *The Rigveda: The Earliest Religious Poetry of India.* Translated by Jamison and Brereton, 1391.
[212] Ibid., 1398.
[213] Ibid., 1397.

before their elders and disrupt the proper sequence."[214] Verse 5 reads: "Just as the days follow each upon the last, just as the seasons follow straightaway upon seasons, so, o Ordainer, arrange their lifetimes, so that the later does not leave behind the earlier."[215] From this we learn that there is a normal arrangement of the sequence of who among the living are next to die, timely death, but we also learn that that sequence can get disrupted.

There is a noteworthy action by those in the poem in an attempt to keep Death back. The obscuring of tracks appears to be insufficient; they need to put a stumbling block in Death's way. Verse 4 describes this: "I set down this barrier here for the living. Let no one of these later go to this goal. Let them live for a hundred ample autumns. Let them conceal death with a mountain."[216] The mountain may be symbolic as Jamison and Brereton note that "in later ritual a stone is set down near the grave."[217] Or perhaps the mountain was a funeral mound. Still, the association of stone and a barrier between Death and Life, makes one wonder if the first gravestones were meant less as markers than as a secure divide between worlds and a sometimes overeager King of that world beyond. We also learn from this what was considered to be a conventional full lifespan in the Vedic period: 100 years.

As for the ramifications for medicine, if symptoms and marks of impending death in general—the bodily and environmental signs—are tracks on the road of prognosis, a road connecting past and future, and this particular road leads to death, and that road is known to be bidirectional, and death is known at times to be overreaching, then it is understandable that the physician and the family members of the sick one might be reluctant to tread this path. This may also be why the doctor had to seek permission from

[214] Ibid., 1399.
[215] Ibid., 1400.
[216] Ibid.
[217] Ibid., 1399.

friends and family, as noted above, if he wished to make an exception and treat someone fatally ill: the dying patient, marked as he is, represents a road to and therefore a road for death. He is a dangerous path. This may go some way toward explaining why a patient would be abandoned, not just in regard to a stopping of treatment, but even so far as physically being left on a river bank or such—as an obscuring of tracks.

THE NATURE OF DEATH

Given that signs indicate not only direction but cycle, one can see how Ayurveda might be described, as above, as the science of the duration of life or longevity. In this sense signs would be able to flesh out not only the course of a particular illness, but the full circuit of an individual's life: What is the period between the start of this one and the start of the next? How much of the circuit is left? This is a partial answer to the especial importance allotted to signs in the medical texts. It also raises questions about what a "normal" or "ideal" lifespan might be conceived to be; one answer as we have seen above is 100 years. Though that ideal of a round 100 may persist well past the Vedic period, an individual, for various reasons, may not make it that far. Malik Itrat *et al.* give the Unani point of view on lifespan as due to varying initial degrees of innate moisture and heat. They explain that due to this phenomenon, "every person has his own term of life."[218] Here they attribute the individual span to biological rather than moral factors. Those authors go on to give Unani's current answer (or one of them) for dealing with aging. They state that maintaining health does not have to do with "securing the utmost longevity possible for human beings," but it has everything to do with stopping "putrefaction" and "safeguarding moisture," therefore making sure "the original type of constitution peculiar to the person shall not change even up to the last moment of life."[219]

[218] Itrat, 460. See also note 81.
[219] Ibid.

So health is a stable constitution throughout the full span of life, and maintaining it is an act of preservation. We will see similar, but not identical, ideas in Chapter 5.

Tiwari and Upadhyay, on the other hand, in the context of Ayurveda, recommend *rasāyana* (rejuvenation therapy) for the problem of premature aging—which therapy they claim "affords a comprehensive physiological and metabolic restoration."[220] So up against "safeguarding" is "restoration"; the first with its emphasis on keeping health from being lost and the second with an emphasis on rebuilding what has been lost, but whether what has been lost is health or youth or the two as equated is an open question for the moment.

For Tiwari, at least, this restoration therapy only prevents premature aging. It in no way extends the lifespan beyond its set duration. He writes: "The *Kalaj jara* is mentioned as *swabhavik vyadhi*, which cannot be prevented by drugs or any other things but *Akalaj jara* is early aging process and may be prevented by *Rasayana* drugs."[221] Restoration and prevention seem to be vocabulary for two different processes, but they come together in this statement where rejuvenation therapy is used in a preventative manner. The question, then, is what is restored which has already been lost but which has not yet caused premature aging? Here he is using the terms "timely" (*kāla*) and "untimely" (*akāla*) as seen above in the context of defining premature death versus a full lifespan, but now they are being applied to aging rather than dying. The Hindi words "*swabhavik vyadhi"* literally mean "belonging to one's own nature" and "illness"—in other words, this means that old age is a natural, inevitable part of human existence. It is a human ailment. So premature aging can be prevented, but normal aging cannot. Devi, on the other hand and still in regard to Ayurveda, argues that both timely and untimely

[220] Tiwari and Upadhyay, 398.
[221] Ibid.

(early) aging can be treated, and that even timely aging can be prevented. But he qualifies the claim with the statement that:

> The measures that are described for it are very difficult to perform and impractical in the current era, and besides, the medicines that have been described for the treatment of *Kalaja Vriddhavastha* are either unavailable or are controversial. However, in our opinion, it is possible to treat *Kalaja Vriddhavastha*, if the treatment principles are followed exactly as described in the texts.[222]

So if you take the unavailable and with it do the impractical, you will succeed. The texts he is referring to where these treatments have been described are the classic texts of Ayurveda. The Sanskrit term with diacritics would be *kāla-jā vṛddha-avasthā*, the first compound meaning produced by time, so timely, and the second compound meaning the condition or period of old age or senility. In context, it appears old age in general is what is being referred to. Devi goes on to add: "As previously stated, the process of aging is totally dependent on diet and lifestyle. Aging can be prevented by [diet and regime.]"[223] This suggests that the "measures" for preventing aging, though currently unavailable and impractical, nevertheless in his mind come under the category of diet and regime. [224]

What relationship such present views on rejuvenation therapies have with the past is a matter of current research interest. For instance, there is a five-year multi-scholar project being led by Dagmar Wujastyk that aims to "examine the histories of yoga, ayurveda and rasaśāstra (Indian alchemy and iatrochemistry), focusing on the disciplines' health, rejuvenation and longevity practices."[225] For those researchers what is of most interest is to trace the "entanglements" and "trajectories" of those fields, answering

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[222] Devi, 517.
[223] Ibid.
[224] *Rasāyana* is not used as a treatment for the dying, it is more a denial of death. It is that pushing it away for the moment. Death someday may be fine, just not now. In this way, it is similar to the recent (though shifting) American denial of death.
[225] Dagmar Wujastyk, "Medicine, Immortality, Moksha: Entangled Histories of Yoga and Ayurveda and Alchemy in South Asia," *Academia.edu*.

questions such as why and how yoga has come to be a part of ayurvedic college curricula.[226] In this study, on the other hand, views on rejuvenation and longevity matter as they pertain to the dying or give us a glimpse of the understanding of the nature of death, for parallel to questions of lifespan and whether it is set or not are questions on its expandability. For example, it is possible for a lifespan not to be pre-set, but for there to be a normal, full span which is ideally attained. Another possibility is for an individual span and/or the human span to be extendable. Tension was noted above appearing already at the start of the Common Era in the CS in regard to expandability. There we saw it presented as available to ascetics, but also saw the idea to be contested. What expandability might mean will continue to be explored, especially in Chapter 3.

Zysk shows a bit of the tangle of the aforementioned disciplines in a paper on bodily winds where he argues that "the medical doctrine [of the winds] began from a yogic formulation," but diverged from there, for the most part remaining separate until the sixteenth century.[227] He notes that, though the medical tradition adopted the idea from the ascetic tradition, it then applied a different methodology to those winds and "described their function as possible agents of disease."[228] The result, Zysk claims, is that "both the yogic-ascetic and the āyurvedic doctrines of the bodily winds have the same purpose of prolonging life, but approached it from two entirely different premises."[229] This is in agreement with recent scholarship which points to heterdox ascetic and Buddhist roots as the foundation of what is known today as the ayurvedic medical tradition. A more nuanced picture of what that pre-classical period might have looked

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[226] Ibid.

[227] Zysk, "The Bodily Winds in Ancient India Revisited," 113; Ibid., 112. See also note 225. Wujastyk's work on this multi-year, multi-scholar project is sure to shed new light on the interaction of Ayurveda and yoga.

[228] Ibid., 108.

[229] Ibid., 113.

like is emerging, but for us what is relevant is Zysk pointing to the medical tradition as we know it in the classical texts as having the "purpose of prolonging life" and the tying of this to wind. These topics will be examined primarily in Chapters 3 and 5.

Mazars's view concurs to a certain extent with that of Zysk. Zysk may or may not agree with the claim that by the fourth century BC "the theory of Āyurvedic physiopathology must have been entirely constituted";[230] still, we get a similar picture of ascetics interested in longevity. Mazars writes: "Onesicrates reports at about the same period that Indians owed their longevity to a perfect hygiene and that the Gymnosophists were doing great research on natural phenomena and disease."[231] Ascetics who are interested in longevity *and* working on disease does not muddy the picture of Yoga and Ayurveda going in different directions; it just describes a common start. This is several hundred years (at least) prior to the period of composition of the early ayurvedic treatises, therefore it may represent a period prior to bifurcation, a time when perhaps medicine and yoga easily cohabitated, only to later part ways and much later to come back together.[232] Why there was such a parting is an interesting question. Wujastyk's long-term study promises to reveal information about such crossings and partings of yoga, Ayurveda, and rasaśāstra, where emphases on longevity, health, and rejunvenation likewise divided or twined. This dissertation has no such broad scope; nevertheless, it may potentially contribute to insight on that topic through its examination of dying and the meanings of death. And by this, I do not only mean via the ayurvedic works. Unani has the potential to reveal possible influences upon shifts in emphasis as it begins to have

[230] Mazars, 7.
[231] Ibid. Note: He was a Greek traveling with Alexander, so this would then be referring to the Gandharan area.
[232] Whatever yoga might have looked like at that point in history, we see especially via Singleton, that the yoga of today shows many recent influences. See: Singleton, *Yoga Body: The Origins of Modern Posture Practice*. Oxford: Oxford University Press, 2015.

a presence in India. In eleventh century writings of Tibb, where are these topics situated? What parallels or perpendiculars of viewpoint are present? This is explored in Chapter 5.

Another scholar who emphasizes Ayurveda as something which is used to lengthen life is Alter. Drawing from Zimmermann, he writes: "Certainly, the term 'Ayurveda' may be translated not just as the science of life or the science of saving life or the knowledge of long life but also as knowledge for prolonging life."[233] Prolonging life leads us to the nature of death, to reflecting on what kind of thing death is seen to be. Just as time and timeliness have been emphasized in relation to death and aging, Alter draws attention to it in regard to rejuvenation therapies as well:

> To understand *rasāyana* as a form of hyperfitness, one must begin with mythology and structural cosmology—the sun, the moon, and the calendrical cycle, in which time is of the essence. As White puts it, the cycle of the seasons and the relationship between life and death are 'reducible to a single dynamic...an ongoing tug-of-war between the sun and the moon, in which the prize [is] moisture, in the especial form of vital fluids."[234]

Though Alter is drawing from other scholars in his discussion, it is this particular iteration which is most helpful. Two things are noteworthy in this statement. The first is, as noted above, the link of both dying and restoration with time. This means rejuvenation therapies potentially have something to tell us about the perceived nature of death due to the mutual link with time. The second is the association of the cycle of time with "vital fluids." The concept of vital fluids is noteworthy because in this statement moisture gets equated with life.[235] It is the prize being fought for and echoes the guarding of moisture

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[233] Alter, Joseph S, "Heaps of Health, Metaphysical Fitness: Ayurveda and the Ontology of Good Health in Medical Anthropology." *Current Anthropology*, Special Issue Culture--A Second Chance? 40 (February 1999), 55.

[234] Ibid. emphasis added. Alter is quoting White from page 23 of his *The Alchemical Body: Siddha Traditions in Medieval India,* Chicago: University of Chicago Press, 1996. He also mentions Zimmermann in relation to this statement based on Zimmermann's "Rtu-Satmya: The Seasonal Cycle and the Principle of Appropriateness," *Social Science and Medicine,* 14B: 94-106, 1980.

[235] I am using vital fluid in the singular because in Western medicine vital fluids has a particular meaning which is not necessarily equivalent with what is being used here.

that was stressed previously in Unani. But the link with time also recalls Mazars's definition of *āyus* as "vital time." The equation here might be seen as Time = Water, where the passing of time is water over the dam, so to speak. That is, the passing of time necessarily equals the loss of moisture. But moisture is not all that we have seen linked to vitality, for in Unani the vital faculty was related to breath, and in Ayurveda, Zysk linked vital breath to time. This triad of time, breath, and fluid will be of significance later on, particularly in Chapter 4, but for now we return to questions about death.[236]

The question of whether life is expandable, when answered in the affirmative, leads to the question of *how* expandable? How long can death be pushed back? Can it be put off indefinitely? In what ways/by what means can it be put off? Biological? Moral? Bio-moral? What does that tell us about the conception of death? Where do mortality and immortality lie? What Alter has to say on the subject is this:

> In its extreme formulation, Ayurveda intimates immortality. It sets about reversing the course of time—although recycling is probably a better image to hold in mind—in order to rejuvenate the body. If one works backward from the problem presented by aging to the foundations of Ayurveda, it is possible to see how a concept of natural good health is alien to the project as a whole and why healing per se is purely anecdotal, at least when compared with the way in which fitness and self-perfection are conceived of as antidotes to the problem of life.[237]

Alter claims "Ayurveda intimates immortality" which is a claim we will be examining more closely. However, in a study that does not assume the concept of death in the East and West as equivalent, it would be a mistake to not explore what exactly might be meant by immortality in South Asia.

Before moving on to immortality, however, there are two more things to draw attention to in Alter's statement. Victory over death, once again, is seen as control over

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[236] In Dominik's 2+1 iteration, might time be the "+" bringing together breath (1) with agni and soma/bile and phlegm (2)?
[237] Alter, 58.

time. Alter uses the term "reverse," so that conquering time would be the ability to unwind its circular path. Or, in terms related to the discussion of signs above, it would mean backtracking. Alter backtracks himself, deciding to prefer the term "recycle." It is not clear what causes him to prefer the sense of reuse over retracing. If it were a body he was referring to rather than Time, the sense of a process of transformation allowing a product (the body) to be renewed and used again would make good sense. In that case, *rasāyana* would be the recycling catalyst. My guess, though, is that is not Alter's reason. I think he may be using the term more literally: that is, Time is being re-cycled. The cycle is being started again, the circuit being reset. This emphasizes the circular nature of time. Nevertheless, intuitively speaking, backtracking seems apt to me. Though this is not the end of the conversation, these concepts will be discussed further.

The second point to note in Alter's statement is where rejuvenation therapy ends up in relation to healing and health. Healing is NOT one of the "antidotes to the problem of life," rather it is "purely anecdotal." That is, the whole concept of health and healing becomes a curious, amusing, thus trivial, story set against the true remedy to death. Perhaps this points to why *rasaśāstra* historically speaking, as Dagmar Wujastyk writes, "was a tradition in its own right."[238] It leaves medicine behind, medicine being beside the point for conquering death: a mere finger in a dam.

Rasa-śāstra, of course, is tied to *rasa-ayana* via *rasa*. So far *rasāyana* has been defined as a rejuvenating drug or therapy, as a medicine that is said to "prevent old age and prolong life."[239] *Rasa*, more specifically though, means a liquid essence or vital fluid (among other things), and *ayana* means going towards, or a path or course. More literally,

[238] In "Medicine, Immortality, Moksha: Entangled Histories of Yoga and Ayurveda and Alchemy in South Asia," *Academia.edu*., Wujastyk states: "Within modern Indian commercial and governmental institutions, rasaśāstra is considered a subsidiary branch of ayurveda, although historically it was a tradition in its own right."
[239] Monier-Williams, 870.

then, *rasāyana* could be described as the path to vital fluids or a circuit of vital moisture. *Śāstra*, therefore, when added to *rasa*, means the science of vital moisture, or treatises thereon. Why it split off from medicine and developed as a separate field may be due to the view of health indicated above. Nevertheless, rejuvenation remedies are included as a part of early Ayurveda. Likewise, the developing science of vital breath, as indicated, may have split off from Ayurveda and been primarily explored in the context of yoga. Nevertheless, it also has a central role in the early medicine. Only later fluid goes in one direction and breath another.

Alter in looking towards immortality in the classical medical texts draws on a story found in both the CS and SS. It is a description of corporeal renewal. He quotes from the SS version: "A man who has taken *soma* will always stay young; he cannot be harmed by fire, water, poison, or weapon. He will be beautiful and learned and will never be exhausted."[240] Here, then, is a medical text promising a procedure that will keep one forever young, at least in Alter's reading of it. But compare this to Dominik Wujastyk's translation of the same passage from the SS: "The visionary man who makes use of the king of plants, Soma, wears a new body for ten thousand years. Neither fire nor water, neither poison, blade, nor projectile, are powerful enough to take his life."[241] Here we see the extension is only for 10,000 years, the period one "wears" the new body for. This is the period named in the CS as well, though it takes longer to attain and includes ingestion of tanning agents.[242] The body needs to be broken down and rebuilt before the "birthing" of the new one. The first translation intimates immortality, the second delineates a period

[240] Alter, 57.
[241] Dominik Wujastyk, *Roots*, 130.
[242] Ibid., 78.

of extension. What does this difference in interpretation reflect? How the medical tradition and greater cultural milieu understood immortality needs to be explored.

Unani contains no idea of rebirth, but the concept of the resurrection of the physical body is found in Islam and reflected in the desire to keep bodies whole when buried, even though differences in the importance of that body are distinguishable. A curious procedure can be found in Tibb which tells of the drinking of embalming fluids *before* death. The body is pre-preserved and pre-perfumed.[243] An uncommon act, to be sure, as I have only seen a single mention of it, but it has echoes elsewhere. Rahman reports it thus:

> There had been instances when physicians had tried to control infection and putrefaction, even after death. Abdullah b Zubayr drank mushk [musk] syrup in large quantity, one or two days before his, death, so that people may not get bad smell of putrefaction from his corpse.[244]

The motivation is given as staving off the stink of the body, and Rahman in conversation about this was dismissive of the practice. But it is worth noting that physician is in the plural here; for whatever reason Abdullah b Zubayr chose to do this, he was not the only one.

A likewise uncommon but still enduring practice has been documented in which Buddhist saints drink preservatives before death. Therefore the body endures, often in exposed locations, long after they are ostensibly dead.[245] They too "wear" their body for years and years beyond a typical human lifespan, and some Buddhist argue they are still alive.[246] Additionally, Honigberer writing in the early to mid-nineteenth century tells of a faquir, a Muslim ascetic, who first having swallowed strips of linen to clean out his

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[243] Rahman, "Medicine during the Reign of Umayyid," 5-6.
[244] Ibid. The Umayyid period ranged from 661-750 C.E. and included parts of modern day Pakistan and into a bit of India.
[245] Vallangi, "A 500 Year Old Mummy with Teeth," *BBC Travel*, July 10, 2025.
[246] "Mummified Monk in Mongolia 'Not Dead', say Buddhists," *BBC News*, February 4, 2015.

digestive tract could suspend his breath and be buried in the earth for months before being restored to life. Honigberer was convinced this was possible, which likely reflects the credibility it was given among those he interacted with.[247] Parry writing today in the context of the Hindu tradition likewise describes preserved bodies of those holy men kept at temples seen as, in some manner, alive. What relationship these practices have to that described in the medical texts above, if any, is unclear. But considering the Hindu practice of crushing the deceased person's skull on the funeral pyre to let out the vital breath as described by Parry, there may well be an enduring sense in South Asia that as long as one possesses a body, death has not fully arrived.[248] In fact, Parry specifically notes that these buried, "cataleptic" holy men have not have their skulls crushed to release the vital breath.[249] Note in the case of the Muslim faquir also that the breath has not left the body; it is "suspended." Though not presently active, the breath is still possessed. In this respect, preserving the body is important for preserving the suspended life.

There certainly has been a desire and a quest for immortality in some sense in both the Islamic and Brahmanical traditions. In these stories, immortality is attained via drinking a liquid substance. Being tricked is also a prominent thematic element. There is, for example, Amir Khusraw's thirteenth century *Ā'īnah-i Sikandarī* which is a common tale of Alexander the Great, including his search for immortality. This story is based upon Nizami Ganjavi's earlier telling, coming just at the end of the twelfth century, and is a forerunner of many a qawwali that tells the tale as well. Seyller outlining Khusraw's collection *Khamsa*, in which this story appears, writes: "In the north, Alexander wages

[247] Honigberger, xxvi and 130-135. The presence of food is eliminated in order to suspend the breath.
[248] Parry, *Death in Banaras,* 6.
[249] Ibid., 260.

successful campaigns against the Russians and Almanis, then strays to search for the miraculous Fountain of Life,"[250] but Khir, Alexander's fellow traveler, manages to end up with the precious liquid instead. It is worth noting that the substance that gives immortality is a fluid to be drunk.

In Brahmanical stories about attaining immortality, deception and consumption also play a significant role. Doniger argues that the nature of the deception comes from seeing ambrosia as food: "Indra tricks his enemy into swallowing him. This episode is a reversal of the usual Indo-European stratagem of eating a potentially immortal enemy."[251] She goes on to say:

> As the vomiting forth is almost always an immediate result of the swallowing in all Indian variants of the myth, the episode becomes not a battle but a rite of passage; the initiate obtains immortality by being swallowed, returning to the womb, gaining the secret of immortality (or the substance, ambrosia), and being reborn from the mouth of his enemy.[252]

Rebirth is an element seen in the corporeal renewal outlined previously. Here, though, the individual is not ingesting an elixir, rather is himself the food. The telling of this tale in the *Kāṭhaka Saṃhitā*, though, makes a distinction between the individual actors in the original story, Indra and Śuṣṇa, and how it is to be applied by the hearers. The *Kāṭhaka* relays the importance of knowing the tale. As per Doniger's translation:

> Whoever knows this bears the ambrosia, and whomever he desires to make live, free of disease, him he should swallow and breathe upon, for he breathes upon him with ambrosia. And thus he lives his full life-span and does not die before his life-span is complete.[253]

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[250] Seyller, "Pearls of the Parrot of India: the Walters Art Museum 'Khamsa' of Amīr Khusrau of Delhi." *Journal of the Walters Art Museum*, 58 (2000): 20.
[251] Doniger, *Hindu Myths*, 280.
[252] Ibid., 281.
[253] Ibid.

This is of interest because it goes beyond the "usual Indo-European stratagem" which here, then, allows the link of both food *and* breath to immortality. What is being translated as ambrosia is soma, which is liquid in form and might be called vital fluid in this context. For us what is important is the manner in which substance and breath come together because soma and breath are different sides of Wujastyk's 2+1 description of the humors. Heat and moisture (bile and phlegm) are more often associated with diet and what kinds of food are eaten, but here breath also gets paired with consumption. This passage also comments on what kind of "immortality" is received by humans with the knowledge: "a full life-span." It promises no extension beyond the normal mortal term, merely the attainment of all of those years. A mortal's mortal immortality—what is that you may ask? Let us look at the immortality of the gods to try to answer that question. Of this type of tale, Doniger has the following to say:

> This is a myth of conflict between two kinds of immortality: the demons pose a threat to the gods, as well as to the normal flow of time and fate itself, by reviving their dead, as they often do in Hindu mythology; the gods take the ambrosia from them and use it for the only immortality which is natural and in order, even for the gods –'a full life-span."[254]

Doniger, then, is claiming that immortality even for the gods does not mean unending existence. But we are left with the question of whether the nature of the immortality the demons attain in the myth Doniger describes is a threat to the gods because it is different in nature than that of the immortality of the gods. Is it an immortal immortality? We can look to one of the myths for an answer to that question. This version of the myth comes from the *Mahābhārata* (MB) at the point when sage Śukra's student has been killed by demons for a third time and Śukra's daughter is grieving over it:

> "My daughter," said Śukra, "Kaca the son of Bṛhaspati has become a ghost. Even when I revived him with my magic he was killed. What can I do? Do not grieve,

[254] Ibid., 280.

> Devayānī; do not weep. A woman like you should not grieve for a mortal. All the gods and the entire universe bow before the inevitable transformation when it comes to them."[255]

We see here that no creatures are exempt from death, ranging from gods and demons on down. Even the restorative power of magic and elixirs appear to have their limits. The problem with the demons is that when they steal the elixir, the gods are left without it, and if both were to have it, it complicates the gods' problem of control. Doniger also notes that the demons having ambrosia is a threat to the normal flow of time. Just why, and how a guaranteed lifespan would impede the flow of time is something to ponder and will be revisited in Chapter 4. But at the moment, it is time to consider these ambiguities of immortality. Where is the line between not-dead and undying?

Thieme sets out to explore the meaning of immortality in Greek, and in order to explain difficulties and ambiguities he finds there, works back through Sanskrit and Avestan to reconstructed Proto-Indo-European. He posits a precursor to Sanskrit *amṛta*. That is, the assumed negative term *n̥mṛto- is supposed to have originally meant both "not dead, living" and "immortal."[256] One might expect this of the Sanskrit participle *a-mṛta* which has the privative *a* added to the participle formed from the verbal root *mṛ*, to die, to depart from life. For though the participles formed with *–ta* generally have a past passive meaning, they can at times also be taken in an active sense.[257] Thus one might expect both meanings to appear, not-dead and, more actively, un-dying, i.e. immortal. Thieme argues, though, that in the Vedic and Iranian, this verbal adjective carries only the later sense: immortal. The first meaning, "not dead/living", he argues comes into

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[255] Ibid., 285.
[256] Thieme, *Studien zur Indogermanische Wortkunde und Religionsgeschichte*, 26. "Idg. *n̥mṛto- muss demnach ursprünglich geheissen haben: a) "nicht tot, lebendig", b) "unsterblich." This is my translation above.
[257] Gonda, *A Concise Elementary grammar of the Sanskrit Language,* 76.

Sanskrit via *amṛtatvá*.[258] Also, he argues that in the Vedic period *amṛ́ta* as a neuter noun meant vitality, life force, and never immortality.[259] In Greek, Thieme attributes the meaning of vitality-giving to slippage occurring between the appositional and attributive adjectives, whereas he sees the early Sanskrit still on the borderline.[260] What remains after the Vedic period are words with parallel meanings formed from words lacking parallel structure.[261] That is, mortal and immortal are formed by *martya*, the absolutive, and *amṛta*, from the past participle. And *mṛta* which means dead does not find its antonym in *amṛta*, due to both the meanings of the latter, living (i.e. not dead) and vitality, being lost. The line between *mṛta* and *amṛta* is such that we skip the expected opposite of not-dead and set up an opposition between dead and (forever) undying without the middle ground. Whether one agrees with Thieme's argument in full or not, it gives some insight into why a degree of ambiguity exists around immortality—both East and West.

Dead at least seems like it would be conceptually clear, but in regards to the West Ariès writes: "Between the moment of death and the end of survival there is an interval that Christianity, like the other religions of salvation, has extended to eternity. But in the popular mind the idea of infinite immortality is less important than the idea of an extension."[262] In this tradition, then, the extension of life happens after the moment of death; there is a post-life reprieve before "the end of survival," i.e. a pause. Sontag argues that this reprieve appears in the West in a secular aspect in psychology. She states: "A

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[258] Thieme, 26. "Die Bedeutung a) lebt fort in vedisch *amṛtatvá* "Nichttotsein, Leben."
[259] Ibid. "*amṛ́ta* n. 'Lebenskraft' (niemals 'Unsterblichkeit'), eigentlich substantiviertes Adjecktiv: "das Lebendige."
[260] Ibid. "In der Tat stehen die vedischen Belege noch auf der Grenzscheide zwischen appositioneller und attributiver Verwendung."
[261] Ibid. "Es bleibt schließlich, in nachvedischer Zeit, nur: *martya* 'sterblich', *mṛta* 'tot', *amṛta* 'unsterblich', *amṛta* n. (In der spezialisierten Bedeutung:) 'Lebensspeise.'"
[262] Ariès, 604.

large part of the popularity and persuasiveness of psychology comes from its being a sublimated spiritualism. [...] The promise of a temporary triumph over death is implicit in much of the psychological thinking that starts from Freud and Jung."[263] She goes on to link this promise of a temporary stay with denial of death in the West, noting the impact such a view has had: "Indeed, the denial of death in this culture has led to a vast expansion of the category of illness as such."[264] The cultural attitude impacts medicine because the denial of death necessitates moving what would normally be associated with death's approach into another category: You are not dying, you are just sick.

However, it is not just in the West where, for most people, extension trumps eternity. In *White Saris and Sweet Mangos*, in a context where denial of death is, as we have seen, not a cultural standby, Lamb saw people aiming for impermanent heaven over ultimate release. Concerning the term *mukti*, she writes:

> [It] means the attainment of peace (*śānti* or *khālās*) and, perhaps an opportunity to dwell temporarily in the realm of heaven, or *svarga*. Some villagers, much more rarely, spoke as well of *mukti* or *moksha* as the state of absolute freedom from all ties to the world of *saṃsār*, a permanent end to the cycle of rebirths and redeaths; but all agreed that this state was virtually impossible to achieve and not much worth striving for.[265]

Heaven is the temporary reprieve, but here it is not set against non-existence but against the cycle of rebirth with all the suffering that entails, including as Lamb points out "redeaths." If one has multiple births, multiple deaths are necessarily implied. One reply to Lamb in response to whether being reborn in the same household would be good, for example, is as follows: "No, the good thing is to go to heaven (*svarga*)."[266] What differs is the understanding of what is being avoided, but the concept of reprieve remains. This

[263] Sontag, 12.
[264] Ibid.
[265] Lamb, 124.
[266] Ibid.

is perhaps what links the instances of Muslim, Buddhist, and Hindu preservation of bodies seen above. Slowing the decay of the physical person provides a reprieve. Whatever the vocabulary used to cover it, though the person may not be alive in the sense we would commonly think of, to the minds of those involved in those traditions, the person belonging to that body is not-dead.

Ghalib toys with the idea of a single versus multiple deaths in the following verse: "kahūn̲ kis-se main̲ ke kyā hai, śab-i g̲ham burī balā hai / mujhe kyā burā thā marnā, agar ek bār hotā?"[267] In other words: How might I tell someone of it? This night of sorrow is a terrible trial. / What wretchedness could death hold since it strikes but once? For Ghalib the separation from his beloved is hundreds or thousands of deaths, so a single one holds no power; it actually carries with it the consolation of its singularity.

The concept of extension of existence after death is metaphysical in nature, but it bleeds into medicine when the efforts at extension involve the body and are made before life ends. Then again, the restorative process described in CS and SS above appears to involve a symbolic or abbreviated and controlled form of death. The body is broken down before it is rebuilt. How potential extension is carried out can give us a view of the nature of death as perceived in these traditions, as well as hints of what is seen as the ultimate cause of death. In the Alexander myth, for example, *āb-i- ḥayāt*, the water of life is sought after for its ability to bestow immortality, but just how it does so may matter. In Christian versions of the myth such an immortality-providing fountain also exists, but the difference is in the Islamic versions one is meant to drink the water versus immerse oneself in it. This suggests that death might be seen as the result of a type of desiccation. This is a concern we will observe further on in the Unani primary sources. The enduring

[267] This verse also appears on the wall in Ghalib's Delhi residence: کہوں کس سے میں کہ کیا ہے، شب غم بری بلا ہے / مجھے کیا برا تھا مرنا، اگر ایک بار ہوتا۔

power of the concept of water as lifegiving in the Islamicate culture of South Asia can be seen in Muhammad Husain Azad's groundbreaking book of literary criticism bearing this title: *Āb-e-Hayat*—poetry as the ultimate restorative to be imbibed. It is as if the body is a lamp that, having drawn the last bit of unctuousness up its wick goes dry, so dies out—another common image found in the Persian/Urdu poetic tradition and one we will see in the medical texts as well. There is a set reservoir, and when it is depleted one reaches *al-ajal*, the predestined time of death.[268] Ahmet Bedir and Sahin Aksoy, in writing about the definition of the end of life in the Islamic tradition, note that the Arabic word for death, *al-mawt*, means literally: "stopping of a thing; stagnating; calming down; insensitiveness."[269] The first of these meanings could be tied to a life being ended because it has run out of the fuel it was initially invested with. In that sense, whoever has given the allotment of fuel, stops the thing in not resupplying, or the thing having no supplies left, stops of itself.

However, the "stopping of a thing" might be better represented by the concept of breath. Indeed, Bedir and Aksoy, grappling with the significance of brain death, make this observation: "According to Islam, the entity that moves the body is named the soul. And the aliment of the soul is air. Cessation of breathing means leaving of the soul from the body."[270] Because air nourishes the soul, a lack of breath drives the soul out. What is important for these authors is that in the case of a brain-dead individual that person is still

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[268] *Ajal* literally means "the assigned, appointed, or specified term of period, (of a thing)" but also encompasses the "term of life," "hour of death," "death," "fate" and "destiny" per Platts, *A Dictionary of Urdu, Classical Hindi, and English*, 23.

[269] Bedir and Aksoy, "Brain Death Revisited," *Journal of Medical Ethics* 37, no. 5 (May 2011), 290.

[270] Ibid. Aliment is an interesting word choice. Curiously, it shares the same its etymology with the English world old. Latin *alere* is to feed, nourish and *alescere* to grow. Likewise, the Greek *aldēskein* means to grow. The cognate in Sanskrit is *anala*, a term for fire which literally means the insatiable one. A fire is what you feed. And in Ayurveda, it is a weakening of the digestive fire which is a characteristic of the old.

breathing, "therefore the soul has not left the body and it isn't real death."[271] Real death is marked by loss of respiration. They distinguish the soul from the breath here, the latter being the support of the former; yet, they also note that lexically speaking the Arabic word for soul means a "'light breeze' or 'wind'."[272] Soul is apparently a later development in meaning, and such a shift can be seen in the etymology of the English word animate also. Animate as an adjective means "possessing life: Alive, living," and as the related verb "to give life to: make alive: bring to life: fill with life <the mysterious vital force that *animates* the cells of the body>."[273] This vital force in Latin *anima* is the soul/mind, and, in Greek *anemos,* it is breath/wind.[274] Mind and soul slip into a word that once contained only air. The Sanskrit cognate verb in the third person singular parasmaipada is *aniti* from root *an*: "to breathe, gasp, move, go, live."[275] To breathe is to live. Still, Bedir and Aksoy bring the role of water in life back to mind when they sum things up saying just as the body cannot live without water the soul cannot live without air.[276] Are these two lives or one?

Breath and death are linked in current Hindu mortuary rites as described by Parry and alluded to above. Parry gives the definition of death in that context "as the instant at which the *pran,* or 'vital breath' leaves the body."[277] Though this may ring of Bedir above, what is different is the perception of that instant. Here, rather than being the

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271 Ibid.
272 Ibid.
273 *Merriam-Webster's Collegiate Dictionary Unabridged,* 11th edition, http://unabridged.merriam-webster.com/unabridged/animate.
274 Ibid.
275 Monier-Williams, 24.
276 Bedir and Aksoy, 293. "Just as in the absence of water the body collapses, so with the cessation of air the spirit goes out.
277 Parry, 180.

visible moment of the cessation of respiration, it is much later when the vital breath finally departs. Parry writes:

> According to the theological dogma expounded by many of my informants, this occurs, not at the cessation of physiological functioning, but at the rite of *kapal kriya*, at which the chief mourner delivers the *coup de grace* by cracking open the deceased's skull in order to release the 'vital breath' from his charred corpse on the pyre.[278]

Here moment of death is controlled and initiated by religious ritual. While on the subject, it is worth mentioning the perceived situation of *ātman* in relation to this "real" moment of death. Parry writes that "though the conventional formula is that it is the 'vital breath' (*pran)* which remains trapped in the skull, hardly any of my informants were prepared to distinguish this entity from the 'soul' (*atma.*)"[279] Though it would be an error to equate the concept of the soul being indicated here with the Islamic conception of the soul, the blurring of breath and soul again is noteworthy. In fact, *ātman,* or '*atma'* as Parry uses it, means self or soul, but also breath or the life principle.[280] Various roots have been posited as producing the term, such as √*an*, to breath; √*at*, to go; or √*vā* to blow. Monier-Williams calls these associations "doubtful" because of the existence of Vedic *tman*, a masculine noun meaning vital breath or self.[281] Nevertheless, these verbs and *ātman* may share a common Proto-Indo-European base given that the Avestan verb "to breathe" is cognate with Sanskrit √*an* and that a substantive exists with the meaning of breath and spirit: *ąnman.*[282] Breath and spirit or soul appear to have a long, tangled past.

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[278] Ibid.
[279] Ibid., 181.
[280] Monier-Williams, *A Sanskrit-English Dictionary: Etymologically and Philologically Arranged with special Reference to Cognate Indo-European Languages*, 1872, 117. http://www.sanskrit-lexicon.uni-koeln.de/scans/ MW72Scan /2014/ web/ webtc1/index.php. See also MW, 1899, 135.
[281] Ibid.
[282] See UT Lingustics Research Center website: http://liberalarts.utexas.edu/lrc/.

Parry does meet one particularly learned man who distinguishes breath from soul, defining the first as active and the second as passive; still, Parry emphasizes that "all agree that some crucial aspect of the person's life-force remains imprisoned in the body when normal physiological functions (pulse, heartbeat, breathing) have ceased."[283] Not only is there "life-force" in what many would consider a dead body, it has some kind of perception or consciousness. Parry states that the body "is consistently spoken of as though it were a sentient being."[284] There appears to be mind, or something akin to it, in the ceased body.

Mazars argues that it is the separation of the psychic being from the gross body that marks death, stressing this disjunction as the definitive moment: "This importance given to the body-mind unity appears in the very definition of life according to Āyurveda."[285] For him, then, it is the departure of the sentience that is emphasized rather than a physiologically observable moment. The gross body that acted as "support (*dhāri*)" drops away from what has "continuity (*anubandha*)."[286] Because the gross body gets recycled and the subtle body continues on to another life, Parry writes that "the person is never entirely new when born; never entirely gone when dead."[287] From this point of view, preservation of the body is unnecessary because a new one is to be had, so what is at stake in holding onto a particular body, a particular life? But it is an intriguing metaphor that Mazars describes: the karmic acts of the individual are said to leave traces which are described as a perfuming it.[288] This recalls the Unani physicians who literally tried to perfume their dying bodies.

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[283] Parry, 181.
[284] Ibid.
[285] Mazars, 35.
[286] Ibid.
[287] Parry, 172.
[288] Mazars, 35.

This conception of death has ramifications for medicine partially in the manner in which it portrays life. When the body is seen as a support, it becomes the protective framework surrounding what is precious. Selby sees this type of imagery at work in the depiction of pregnant women:

> A pregnant woman is like a pot brimming with oil that should not be shaken about, and ought to be treated as such. The classical Greek Hippokratics likened the female body to a ploughed and sown field and her uterus to a jug. In Sanskrit contexts, we certainly find the field imagery, especially in poetry and in epics and legal literature, but in Sanskrit medical collections, it is not the uterus that is the jug or pot: it is the whole woman herself; not just her womb, but the whole of her.[289]

Selby makes an important distinction here between life being held in the uterus versus in the woman as a whole. If a woman were seen simply as having an empty space in which a second life were to be stored, there would be less need of caution. Liquid can always spill from a vessel, but in the case of the Sanskrit medical literature, one vessel, the woman, suddenly has a double dose of life. When any vessel is exceedingly full, the slightest upset will send liquid contents sloshing. I have examined a similar image of life as support from the CS in "Shelters of Life, Bars to Death," which describes life as a liquid-bearing pot. When life is conceived as a liquid, death may be seen as the loss of moisture: death as desiccation once again. So as above, life is at times seen tied to breath and at others, it is thought of in relation to preservation of fluid.

Dominik Wujastyk complicates this picture in his "Agni and Soma: A Universal Classification." In regard to lethal points found on the human body, he writes:

> Those which kill immediately are of the essence of agni; for when the qualities of agni are rapidly reduced, they cause destruction. Those which kill after an interval are of the essence both *agni* and of *soma*; although qualities of agni are rapidly

[289] Selby, "Narratives of Conception," 262.

> reduced, the qualities of *soma* are reduced by degrees, so destruction occurs after an interval of time."[290]

We have mentioned agni and soma above as the players leading Wujastyk to his 2+1 humoral theory. So far we might have simply thought of a lack of moisture as causing a slow death and a lack of breath as causing an immediate one. But let us look at this in relation to this pair. Wujastyk traces the two back to the Vedic period, and stresses their importance as enduring primary categories: "The category of Agni-related items includes everything of a hot, fiery, dry or parching type while Soma-related items are moist, nourishing, soothing, and cooling."[291] This antithesis gets tied to the seasonal shifts: a tug of war between moistening and drying factors. Furthermore, as we have seen, agni and soma are associated with two of the bodily humors: bile and phlegm. Wujastyk gives an example from the SS within a discussion of savors: "Next the author notes the sources of the humours: the origin of wind is the self, bile is fiery (the word used is '*āgneya,'* the adjectival form of '*agni'*), and phlegm is watery ('*saumya'* from '*soma'*)."[292] This recalls the discussion above of soul/self as stemming from words for breath or wind. Now wind is said to come from the self, but this wind is more specifically wind as bodily humor. Wujastyk continues to describe here the special, closer relationship between agni and soma in comparison to wind.[293] He also finds the relationship of the two antithetical humors to be strong in the earliest Greek medical sources as well: "Here we have evidence of an early Greek discourse concerning humours in which only the bile and phlegm were implicated."[294] Elsewhere the same text states: "there is a popular view that diseases result from the conflict of two opposites—heat and moisture—in our bodies."[295]

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[290] Wujastyk, "Agni and Soma," 357. Italics as in the original.
[291] Ibid., 347.
[292] Ibid., 351.
[293] Ibid., 364 and 365.
[294] Ibid., 363.
[295] Ibid.

This latter statement is even more useful than the previous one in terms of the historical development of Greek humors because as with the Indic system described above, the antithesis of hot and wet are initially located on the same gradient, so both directly impact moisture level. In Greece, when four humors are eventually seen, that gradient has also split: hot-cold is one gradient, and wet-dry another. The presence of four humors and two gradients then allows for intersecting perpendicular lines, thereby creating four quadrants of temperament. The symmetrical geometry this allows develops into a significantly different concept of medicine. What health is changes with the crossing of these lines. Chapters 3 and 5 will deepen this discussion.

Numerous scholars have wondered about the leap between the Vedic conception of healing and medicine and the radically different medicine of the classic period. Here Wujastyk indicates one shift. Just as the shift between one gradient of opposing qualities to that of two gradients sets up a dynamic which significantly changes Greek medicine, it is likely that the addition of a third humor allows such a refiguring of thought which has lasting ramifications in the medicine—even if the third humor is of lesser importance and that lesser importance continues to weaken further over time. Its presence, however tentative, may well have changed the template of Indic medicine and allowed the development of what is now known as Ayurveda. In this respect, the importance of Wujastyk's article on Agni and Soma in leading to such an understanding cannot be overstated. Selby's understanding of Ayurveda's hesitancy toward symmetry may also be of help here. And this study of death and dying will speak to these questions and others.

THE AYURVEDIC WORKS

Chapter 3: *Carakasaṃhitā*

The first Ayurvedic work which will be examined is the *Carakasaṃhitā* (CS). As mentioned above, as a written work it dates from the first or second century of the Common Era. However, it draws from materials existing prior to that. As it comes down to us today there are eight major sections, the first of which is the *sūtrasthāna.* The word *sūtra* as seen in the name of the section means, in this context, axiom or aphorism, leading to the expectation of concise statements of formative principles. And, indeed, the *sūtrasthāna* may be thought of as a kind of textbook introduction; that is, it is the place where the fundamental principles and the general scope of the medicine are laid out. Prognosis, treatments, drugs, hygiene, and diet are all mentioned, but for the most part in a broad sense. Much of what appears here will be returned to and elaborated on later in the treatise, sometimes even contradicted. This chapter will work its way through each section in turn beginning with the *sūtrasthāna.* How do key concepts related to death make their appearance here? If Die, Death, Curability, and Lifespan were characters being listed at the start of a play, what tagline would they be given by the CS?

One thing is certain: Hamlet—with his 'To be or not to be', so easily reworded as 'To die or not to die'—could have no part. For the first chapter of the first section of this study of life bears the name *dīrghañ jīvitīyam* (long life).[296] It is no exit strategy. Right from the start we see the treatise has an aim. It is not merely a science (*veda)* seeking to understand life (*āyus)*, but one which seeks to impact it, to provide a long (*dīrgha)* life (*jīvita*). Given, then, that this treatise aims to enhance life, one might expect to find the more negative characters only under discussion in general explanations of the workings

[296] CS. Sū. 1.3. The 'study of life' or 'science of life' are possible translations for the term *Ayurveda*which will be considered more closely in short order. All translations are my own unless otherwise stated.

of life—for Life and Death are often found to be mutually explanatory. Like Siamese twins, they have a shared boundary: one defines and limits the other.

In fact, this is exactly where we most frequently encounter the concept of dying in this section. For example, it is said that if there is a reduction in the vital fluid called *ojas*, one will perish (*vinaś*).[297] Or in regard to wind in the body (*vāyu* in this verse; also seen as *vāta*) that, when it is irritated, it prevents (*uparudh*) respiration; that is, the afflicted one dies.[298] It also appears definitionally in a discussion about conception. In considering how a soul comes into an embryo, the idea of it being contributed fully by one parent is discarded with the comment: *sarvaś cet saṃcaren mātuḥ pitur vā maraṇaṃ bhavet.*[299] In other words: If the whole of it [the soul] were to pass through [to offspring], the mother or father should die. Soul is given as an essential element of life, thus partially demarcating the bounds of the definition of life as understood here.

The second place dying appears in the initial section is in relation to doctor-patient interactions. One such case is where a physician is urged to move quickly to treat a person with a serious loss of consciousness, the latter being compared to a pot sinking down in water where hitting the bottom represents death.[300] Time is of the essence. In another case, physicians are warned about possible complications in oleation therapy. If a patient who has been started on such a treatment has a very strong digestive fire, the text states that then: if he does not take very cold water, he is consumed by his inner fire, just as a snake going through dry grass is consumed by the fire of its own poison.[301] Without

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[297] CS Sū.17.74.
[298] Ibid., 12.8.
[299] Ibid., 11.10.
[300] Ibid., 24.44-45. sa nā saṃnyāsasaṃnystaḥ kāṣṭhībhūto mṛtopamaḥ / prāṇair viyujyate śīghraṃ muktvā sadyaḥphalāḥ kriyāḥ // durge ‘mbhasi yathā majjad bhājanaṃ tvarayā budhaḥ / gṛhṇīyāt talam aprāptaṃ tathā saṃnyāsapīḍitam //
[301] Ibid., 13.72. sa cet suśītaṃ salilaṃ na āsadayati dahyate / yathā eva āśīviṣaḥ kakṣamadhyagaḥ svaviṣāgninā //

due care the treatment can be fatal. We see fire associated with treatment choices and dying again when we are told: It is better to sacrifice oneself rather than being set alight by an ignorant medic.[302] In other words, it is a better to die on your own, in your own way, by your own choice, than having the process expedited by one without sufficient skills to affect a cure.

The question of the reliability of proper treatments even in skilled hands comes up as part of a conversation held with Ātreya, the primary preceptor in the CS. A student complains that, in spite of these factors, some ill people are still dying (*mriyamāṇa)*, so medicine is really of no use.[303] Ātreya does not let this complaint stand, as one can imagine, as it would undercut the value of the discipline. Evidence shows that during the period of the writing of this text, a professionalization may have been occurring in medicine, which likely included practitioners of this school trying to set themselves apart from other schools and from less trained medics while trying to prove the worth of their knowledge.[304] Given this, the student may be just a straw man, for this allows the preceptor to firmly state that patients with all the requisite factors for good care do not die (*mriyante)*.[305] He gives the reason for this as: Because the treatment of curable diseases which are treated cannot be unproductive.[306] That is, what is meant to produce a result must always produce a result; the causal link cannot be broken. Thus, if such a patient does die, it necessarily means the disease was incurable. And of the incurable, Ātreya

[302] Ibid., 9.15.
[303] Ibid., 10.4.
[304] Kathleen Longwaters, "Shelters of Life, Bars to Death: The *Tridaṇḍa* as a Simile for Life in an Early Sanskrit Medical Text," Paper presented at *South and Central Asia Fulbright Conference,* February 28-March 3, 2016. See also Patrick Olivelle, "The Medical Profession in Ancient India," eJournal of Indian Medicine 9, no. 1(2017):1-21, http://www.indianmedicne.nl/.
[305] CS Sū.10.5.
[306] Ibid.

states: *na hi alaṃ jñānavān bhiṣaṅ mumūrṣum āturam utthāpayitum*.[307] Meaning: For even a knowledgeable physician is not sufficient to raise up a feeble one who is at the point of death. Physician does not trump curability, or rather more specifically incurability, and, gross incompetence aside, this determines who will live and who will die. For this reason, the factors defining curability become important to this study.

For this same reason, it is crucial for a physician to be able to distinguish between the two categories. One might assume that importance is for the sake of the sick and dying, but the text here stresses the import for the practitioner: The physician who treats the incurable surely would incur loss of fame, knowledge, and wealth and incur reproach and disfavor.[308] What Sanskrit terms are being used as curable and incurable will be discussed shortly, but for the moment notice that this is a prognostic category which comes with an action plan. Multiple times in the *sūtrasthāna* the directive that only the curable should be treated is reiterated, perhaps most bluntly in chapter 1 verse 63 which stands in contrast to verse 62 where treatment of curable disease is prescribed.[309] In padas a and b, the verse states: *sādhanaṃ na tv asādhyānāṃ vyādhīnām upadiśyate*.[310] In other words: But, in regard to the incurable diseases, medical remedy is not indicated. The 'not indicated' here which is coming from the verb *upa√diś* has a fairly strong sense. Another way to phrase it would be that care under such circumstances is not what 'is taught.' Knowledge that is passed down by preceptors is very highly valued in this culture at this time. Thus, expressed more directly, it means: do not do this.

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[307] Ibid.
[308] Ibid., 10.8.
[309] In addition to CS. Sū.1.62-62, this advice is given at I.1.134 and at I.10.21.
[310] CS Sū.1.63. One place a threefold division is seen is in a prose passage at I.29.7:
...sukhasādhyakṛcchrasādhya api apratyākhyeyānāṃ ca rogāṇāṃ...

The basic category of curable (*sādhya*) and incurable (*asādhya*) is often, but not always, broken down into a fourfold division: *sukha-sādhyaṃ mataṃ sādhyaṃ kṛcchra-sādhyam athā api ca / dvi-vidhaṃ ca api asādhyaṃ syād yāpyaṃ yac ca an-upakramam.*[311] Starting with the first half of the verse, we learn that of that group recognized as curable, there are those which are easily (*sukha*) curable and also those which are curable only with difficulty (*kṛcchra*).[312] The word for curable, *sādhya*, also carries the sense of feasible or attainable, coming from the connected verbal roots √*sidh* / √*sādh*. These roots likewise mean "to be accomplished, to be fulfilled," and "to be completed."[313] This, then, may provide another reason as to why the incurable are not treated. The term, *asādhya*, which is used with remarkable consistency throughout the text given that Sanskrit is a language liberal in the use of synonyms, is formed simply by adding the privative '*a'* to the term for curable. Thus it means 'what is *not* possible to be accomplished.' So the physician is perhaps merely advised not to do what is not doable. The aspect of feasibility is echoed in the following statement: *tad eva yuktaṃ bhaiṣajyaṃ yad ārogyāya kalpate*—only that remedy which serves as a means to freedom from disease is proper. That is, it is not proper to employ remedies which cannot satisfy this criterion. This idea of one possibly being subjected to ineffective therapies recalls the earlier declaration that it would be better to sacrifice oneself [to death] than to suffer at the hands of an inept physician. It begins to sound as if undergoing treatment was not always innocuous.

311 Ibid., 10.9.
312 The focus here is on the categories. Who or what is curable is not communicated. It could be cases, diseases, patients.
313 Monier-Williams, 1114 and 1104, respectively.

But returning to the second half of the verse which names the fourfold division, we read: *dvi-vidhaṃ ca api asādhyaṃ syād yāpyaṃ yac ca anupakramam.*[314] As rendered in English it reads: There should also be two types of the incurable, that which is *yāpya* and that which is which *anupakrama*. Before trying to pin down the meaning of these two terms, let us consider *syād*, or outside of the phonetic setting of that particular sentence, *syāt.* It is the third person, singular optative of the verb √*as*, to be. It has no parallel in the sentence in the first half of the verse. That is a nominal sentence, so the verb 'to be' is implied; this suggests the indicative form. However, one might argue that the optative in the second two padas could cast a shadow back on the first two, coloring them optative. This is not the argument I am making here. Given that the incurables are sometimes broken down into two subtypes and sometimes not, I argue that the optative sense is only applying to the second two padas. The logic would run that since there are two types of curables, there ought to be two types of incurables as well. It would be a category existing for formal reasons, a fact that might explain the less than thorough application of it, and the difficulty that comes with trying to make a parallel to 'easy to cure' and 'hard to cure' in a category where all must remain, nevertheless, incurable.

As for the description of the two types of incurables, *an-upakrama* is the less troublesome. In the medical literature, *upakrama* is commonly encountered in the meaning of treatment, and '*an*' is the form of the privative occurring before a vowel. One could just say, therefore, that this is the category which is not given treatment. One could say that those cases which are not feasible to treat should not be given treatment. Yet, if non-treatment was the primary sense being used here, then it would be redundant to go on to say they should not be treated, as we so often see: it would be implicit in the term.

[314] As in note 16 on CS Sū.10.9.

Another sense of *upakrama* is 'what leads to any result.'[315] So, thinking along the lines of efficacy, it might be better to translate it as 'that which does not lead to any result.' This shifts the emphasis from immediate action to potential outcome. I then use this to reflect upon the meaning of *yāpya.*

Yāpya comes from the causative form of *yā* which includes under that derived verbal form the meanings "drive away, remove, cure (a disease)."[316] The idea of an incurable category of ailments which is to be removed or to be cured is obviously problematic. On the other hand, *yāpya* in its sense of time to be spent or passed does not seem much better given the injunction to physicians not to treat the incurable—if it is from the viewpoint of the doctor spending his time. It could mean that the sick person spends time with it, in the sense of a chronic illness. This is not to be ruled out, though as we will see in the discussion on the *cikitsāsthāna*, it is not the only term used when talking about long-term illnesses.[317] Still, to create a real parallel with *an-upakrama*, one might be inclined to define this as 'that which causes [one] to subsist', coming again from a meaning of the causative form of the verb.[318] With the terms so translated, the sentence would read: There ought to also be two types of the incurable, that which [if treated] causes [one] to subsist and that which does not lead to any result. We find evidence for this translation elsewhere when the fourfold division is again given and where, in respect to those known as *yāpya*, the author writes: *su-sādhv api kṛtaṃ yeṣu karma yātrā-karaṃ bhavet.*[319] That is: action taken in respect to these, even very well done, would [only] support life. Though this does not entirely rule out the meaning of *yāpya* as something

[315] Monier-Williams, 161.
[316] Ibid., 813.
[317] cf CS. Sū.23.31 where *cira* (long lasting) is used to describe an enduring illness.
[318] Monier-Williams, 831.
[319] CS. Sū.18.39.

that involves time spent, what is clear is that any actions taken would not, even in the best-case scenario, affect a cure.

Curiously, a similar category of disease is described by Plato in the *Republic*, a dialogue written somewhere around the time of Hippocrates's death and a few hundred years before the CS was written down, possibly at a time when those ideas were forming.[320] Compare the following passage where Socrates is complaining about changes to the style of medicine with a verse from the *sūtrasthāna* which is part of a description of diseases which are *yāpya*. In the context of discussing what a certain patient was given to drink after surgery, Socrates says:

> I said, that before the time of Herodicus, as they say, the Asclepiads did not use this new kind of medicine which coddles diseases. Herodicus was a trainer, and when he lost his health he mixed gymnastics with medicine, and first and most especially tormented himself and afterwards a great many others.

His interlocutor interrupts with the question "In what way?" and Socrates continues:

> By prolonging his own death, I replied. He closely followed the course of his illness, which was mortal; he could not cure himself, I think, so he lived out his whole life doctoring himself, without leisure for anything else. In torment if he departed at all from his accustomed regimen, he won by his skill the prize of old age, and died hard.[321]

Socrates's gripe with this situation is that it did not allow the man time or energy to contribute to the society he was living in. The sick man was, in his opinion, simply a drag on the polity. For our purposes, on the other hand, the noteworthy elements in the story are that the illness 'was mortal' and proved incurable. However, with constant attending to it accompanied by constant care to diet, etc., he eked out a life. Similarly in the CS, the type of illnesses which are incurable, but not absolutely so, are described as follows:

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[320] I am not making any suggestions here about direction of influence, merely pointing to what appears to be a shared conceptual category.

[321] Plato, *Republic,* translated by R. E. Allen, New Haven: Yale University Press, 2006, 96.

śeṣatvād āyuṣo yāpyam asādhyaṃ pathya-sevayā/ labdha-alpa-sukham alpena hetunā 'śu pravartakam. As translated: The *yāpya* [type] of incurable [disease is such that] one, having been caused to apply himself to a fitting regime, obtains a little ease which is quickly set afoot by the slightest cause. So as above, the disease is incurable, barely manageable, and easily inflamed. It seems to be more precarious than simply an ongoing condition which we might call chronic.

Beyond knowledge of, actions in relation to, and the categories related to curability, what is found in this first major section of the CS is a plethora of examples of what conditions fall under which type of curability in a threefold or fourfold division. This is easy to cure, that is impossible to. For the most part listing these does not contribute anything significant to the discussion. A few, though, are worth pointing out. First of all, old age comes under the category of *yāpya*, for whatever that may help elucidate about its definition and/or the view of old age.[322] Furthermore, diseases due to the aggravation of all three humors are said in some places to be difficult to cure (*duś-cikitsya*)[323] and in others out and out incurable (*pratyākhyeya*).[324]

One final factor is seen in relation to curability which was implied above in the example of the sinking pot: time. Time is said to be but transformation (*kālaḥ punaḥ pariṇāma ucyate*), which is perhaps the reason it is of the essence.[325] Once something has undergone extensive change, it is hard to ever bring it back to its original state. Early treatment or treatment even prior to the onset of disease is stressed.[326] Delaying treatment gets equated with the deprivation of life. Time (*kāla*) has also as its meaning death. Time

[322] CS Sū.25.40.
[323] Ibid.
[324] Ibid., 10.11. See also the discussion under the *cikitsāsthāna* below.
[325] Ibid., 11.42.
[326] Ibid., 11.63.

makes a calculus of medicine, a concept that will be explored later in regard to the text *Kālajñāna*. Yet now we will turn our attention to death as expressed in the *sūtrasthāna*.

When a direct term is used for death in this section rather than a euphemism or oblique reference, it is generally *mṛtyu*. In fact, the first time *kāla* is used with the meaning of death in the *sūtrasthāna* is less than a dozen verses before the end. Intriguingly, it comes up in the context of physician incompetence. Such doctors are called *kāla-pāśa-sadṛśa*, ones who are akin to the noose of death.[327] They function like a snare, catching living beings and delivering them to death. This reference forms a bookend; for, though the first reference to death in the CS uses the word *mṛtyu,* the topic is the same. Incompetent doctors are called attendants of death. Death in the introductory section of the treatise begins and ends with physicians. And there is no mincing of words in proclaiming judgment on these unskilled practitioners. The whole verse reads: *tyakta-dharmasya pāpasya mṛtyu-bhūtasya durmateḥ / naro naraka-pātī syāt tasya saṃbhāṣaṇād api*.[328] That is, we are told in regard to one ignorant of medicine who nevertheless attends to patients: In relation to such a one who has abandoned dharma, who is evil, who is an attendant of death, and ignorant, even just a conversation with him would cause a person to sink down into hell. Several other references associating inept doctors with death are also seen.[329]

Closely related to unskilled practitioners, but taken from another point of view, there is mention of death as a result of improper treatment.[330] And, as seen above with the concept of dying, the most numerous mentions of death are in relation to specific diseases or actions which lead to that result. Many of these are quite general in nature, such as the

[327] Ibid., 30.83.
[328] Ibid., 1.130.
[329] Ibid., 29.11 and I.29.9.
[330] Ibid., 16.46 and I.18.37.

statement: *tathā eva mṛtyor viruddham annaṃ pravadanti hetum*.[331] Meaning: Antagonistic food is likewise a cause of death, they say. Others begin to slide into definitions of death, such as a discussion on the bodily substance *ojas*: *yasta* nāśāt tu nāśo 'sti dhāri yad hṛdaya-aśritam/ yac charīra-rasa-snehaḥ prāṇā yatra pratiṣṭhitāḥ.*[332] Taking the *yasta* as *yasya* as per the note below, this reads: But from the destruction of it [*ojas*] comes the destruction of the bearer; it dwells in the heart; it is the unctuous syrup of the body wherein the vital breaths are established. Furthermore, it is said to come into the body at the very start of life.

Ontologically, Ātreya claims the beginning of life has a cause but death does not: *pravṛtti-hetur bhāvānāṃ na nirodhe 'sti kāraṇam*.[333] This is a little strange to see as an argument given that curable diseases were argued to always be curable because an effective cause had to remain a cause. To this comment on death having no reason, he adds: *ke cit tatra api manyante hetuṃ hetor avartanam.*[334] That is: In regard to that, some think that the cause [of annihilation] is the cessation of the [causing] cause. There seems to be a fine distinction between no cause for the end of life and the removal or absence of a cause as the determining factor. But it is a distinction that he wants to mark. As so often in South Asian philosophical traditions, one can take what is given as 'what some people say' as what is shortly to be proven wrong. And, indeed, Ātreya reiterates and reinforces his position.

> *na nāśa-kāraṇa-abhāvād bhāvānāṃ nāśa-kāraṇam /*
> *jñāyate nitya-gasya iva kālasya atyaya-kāraṇam //*
> *śīghra-gatvād yathā bhūtas tathā bhāvo vipadyate /*

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[331] Ibid., 26.103.
[332] Ibid., 30.11. This verse in the CS edited by Acharya has *yasya.* This is a different reference to *ojas* than the one mentioned above at the start of the chapter.
[333] Ibid., 16.28.
[334] Ibid.

nirodhe kāraṇaṃ tasya na asti na eva anyathā kriyā //[335]

Here he begins by saying in the first verse: There is no cause of destruction of beings given the non-existence of a cause of destruction. This is what we have heard already, but he adds in that verse: It is known to be as with the cause for the passing away of constantly moving time. Notice he does not call time the cause itself, rather he is making an analogy. He goes on to clarify in the second verse: Due to its nature of passing quickly, since it comes into being, therefore [that] state of being falls away; in the destruction of it, there is no cause; there is just no other [possible] action. Passing is just the nature of time. The question to ask, then, is why does this distinction matter to us? What ramification does it have in a medical treatise? The final half verse helps to draw out the importance for physicians. The feminine noun *kriyā,* in addition to meaning action or undertaking, in the context of medicine means applying a remedy or cure. Thus, the upshot is that, in so far as life runs according to the parallel with time, there is no cure for death: passing is inherent to our nature. Nothing can ultimately be done to change that fact. To what degree this claim is supported, contradicted, and/or nuanced in the remains of the text will continue to be discussed.

There may be no cure for death, but death is not the complete end. Good acts are said to lead to heaven after this life.[336] This then gets used to argue for the importance of life, a long life, in order to perform those good acts and to attain heaven in addition to any other goals of life. Of these various goals, the texts states: *āsāṃ tu khalv eṣaṇānāṃ prāṇa-eṣaṇāṃ tavat pūrvataram āpadyeta* / *kasmāt?* / *prāṇa-parityāge hi sarva-tyāgaḥ*"[337] That is: But indeed, out of these desires, the desire which should be the

[335] Ibid., 16.31-32. That we have the abstract noun *gatva* here and not the gerund *gatvā* followed by *ādi* is supported by Cakrapāṇi also taking it as such in his comments on this verse.
[336] Ibid., 11.33.
[337] Ibid., 11.4.

foremost aim is that of life. Why? Because in the letting go of life, everything is forsaken. This concern, then, leads us to considerations of lifespan and longevity.

In the first chapter of this section, the whole of this "*veda"* is linked to a desire for long life: *ṛṣayaś ca bharadvājāj jagṛhus taṃ prajā-hitam* / *dīrgham āyuś cikīrṣanto vedaṃ vardhanam āyuṣaḥ*.[338] As rendered in English: The sages, desiring long life, took possession of this science (*veda*) which increases [one's] lifespan from Bharadvāja for the benefit of beings. Examination of the Sanskrit would show that I have translated *āyus* first as life and then as lifespan. In its first appearance, we see *dīrgham* (long) paired with *āyus*, clearly meaning long life. In the second case, one could translate *vardhanam āyus* merely as increasing life, but given the parallels of time and life, the importance not just of vitality but of duration comes through. The desire for life in which good acts can be done also necessitates the reading of a good life as a long life, for actions require duration. Thus, the increase above may justifiably be described as an increase to the span, the duration, of life. What precisely is meant by a lifespan and the increasing of a lifespan will be explored. At the moment, though, it might be useful to look at some of the synonyms given by the text for *āyus*.

In one example, we are told: *tatra āyuś cetanā anuvṛttir jīvitam anubandho dhāri ca iti eko 'rthaḥ*.[339] That is: Therefore, life, consciousness, continuance, living, binding, bearing—[these] are [all] said to have one and the same meaning. A similar set of synonyms is seen earlier in the *sthāna*: *śarīra-indriya-sattva-ātma-saṃyogo dhāri jīvitam* / *nityagaś ca anubandhaś ca paryāyair āyur ucyate*.[340] Thus, listing the terms from last to first: Life is spoken of with the synonyms binding, constantly dwelling, living, bearing,

[338] Ibid., 1.27.
[339] Ibid., 30.22.
[340] Ibid., 1.42.

and the union of soul with mind, senses, and body. Taking *nityaga* (constantly dwelling) as parallel to *anuvṛtti* (continuance) and the compound *śarīra-indriya-sattva-ātma-saṃyoga* (the union of self, being or mind, sense faculties, and body) as an equivalent to consciousness—perhaps in being requisite for consciousness—then the list remains consistent. What this does for us is to flesh out the definition of life. Each of these characteristics is seen as so vital as to become equated with life itself.

A list of synonyms for death is also conveniently given which can be held up for comparison to these essential characteristics of life. A clear parallel in structure can be seen between the first example given above and this one which follows even though the first is written in verse and this second in prose: *tatra svabhāvaḥ pravṛtter uparamo maraṇam anityā nirodha ity eko 'rthaḥ*.[341] Translated, we have: Therefore, the manifestation of one's original state, ceasing, death, not lasting, destruction—[these] are [all] said to have one and the same meaning. In the original list (*āyuś cetanā anuvṛttir jīvitam anubandho dhāri)*, ceasing finds its antonym in continuance (*anuvṛtti*), death is set across from life (*āyus*), but also in its meaning of dying is a counter to living (*jīvita*). Not lasting finds a pair in bearing (*dhāri*) given that *dhāri* carries the sense of stability and maintaining while *anityā* means not only something which is transient but also something which is unstable. Destruction, in the sense of the breaking apart, is the antonym for binding (*anubandha*).[342] This leaves only the complex concept of returning to an original state in the list of synonyms of death, and it leaves consciousness (*cetanā*) from the list of life. These are certainly meant to be antonyms, especially since the parallel for consciousness found in the second list of defining characteristics of life employed the union of self with being, body, and senses which was seen as requisite for

[341] Ibid., 30.25.
[342] It could also be in the sense of breaking a continuing sequence.

consciousness. Given that these have to be yoked together, they are not, in that complex form, representative of an original state; thus, the return to an original state would necessitate the loss of consciousness. Life unbound.

So this science of life, in addition to providing knowledge about the characteristics of life and ideas about lifespan, would also include teachings on what may increase or decrease that span. Relevant concepts in regard to what impacts lifespan will be considered after first taking a closer look at what is meant by this duration. How long is a human lifespan? Is it boundless? Is it bounded? In several places, the number 100 years comes up; a number which, by the way, is also encountered in the *Ṛg Veda.*[343] We will take a look at a couple of examples from this section of the CS. In the following case the number is approximate, at least according to our current calendrical system. We are told: *ṣaḍ-triṃśataṃ sahasrāṇi rātrīṇāṃ hita-bhojanaḥ / jīvaty anāturo jantur jita-ātmā saṃmataḥ satām.*"[344] Starting with the second half of the verse then moving to the first half, we have: A self-controlled man under the influence of virtuous ones, lives free of suffering for 36,000 nights enjoying well-being. In our calendar, one would need 36,524 nights to make 100 years—but the point is clear. A second, more typical example gives the round number in years: *sva-stha-vṛttaṃ yathā uddiṣṭaṃ yaḥ samyag anutiṣṭhati / sa samāḥ śatam avyādhir āyuṣā na viyujyate*.[345] In other words: One who thoroughly follows the self-possessed mode of life as [previously] mentioned is not deprived of 100 years of life free from illness. This intimates that the maximum, or at least the ideal, is 100. Someone who is 'not deprived' gets that amount. One hundred years is a full lifespan.

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[343] See Chapter 2, footnote 236.
[344] CS. Sū.27.348.
[345] Ibid., 8.31.

To complicate this picture, we will go back to an inept physician to see what we might be able to learn about normal lifespan(s). We read: *yad-ṛcchayā sam-āpannam uttārya niyata-āyuṣam / bhiṣaṅ-mānī nihaty āśu śatāny aniyata-āyuṣām*.[346] Thus: Having accidentally accomplished the delivery of one whose lifespan was fixed, the alleged physician swiftly slays hundreds of those whose lifespan is not fixed. This translation is intentionally provocative. *Niyata-āyus* could just as well, and perhaps more likely, mean a self-governed life, and so its negative mean the life of one who is not self-governed. But the first translation raises the question of whether lifespan is a moveable feast—by which I mean, does everyone get the same portion? If not, what are the exceptions and why? Does the portion possibly slip back and forth within a single individual's lifetime? For whether you take *niyata* as 'fixed' or as 'self-governed', there is obviously some kind of difference in the lives or lifespans of these two types of people such that even an incompetent doctor—who we learned earlier is so dangerous that merely a conversation with him could plunge an individual into hell—this doctor does not manage, intentionally or not, to dispatch one who is *niyata* to death. This needs to be explored further.

An intimation of immortality is seen in the following enigmatic verse: *na hi na ābhūt kadā-cid āyuṣaḥ santāno buddhi-santāno vā śāśvataś ca āyuṣo veditā.*[347] This is found in a prose passage discussing the eternal nature of *āyurveda.* I translate these sentences as: For there will not ever be continuance of knowledge and not continuance of life; [thus] the knower has perpetual life. The question this raises, then, is who is this knower? Ātreya? Agniveśa? Any learned practitioner? Gods? Men? Whoever may be included in this category, it is clear that comprehension of the principles of this science is requisite to being there. Precisely what is meant by immortality will be important both in

[346] Ibid., 9.17.
[347] Ibid., 30.27.

the āyurvedic context and comparatively and will be explore in detail below. However, in finishing this contemplation on lifespan, it may be useful to look at some of the specific actions and ailments which are said to impact lifespan.

A list of these could go on for many pages, but here I will examine just one aspect of the things said to increase or decrease lifespan and that is its concomitants. When something is said to be good and wholesome, what else besides lifespan is simultaneously improved? And when something is said to be deleterious to life, what else might be simultaneously damaged or destroyed?

Generally in the description of what is impacting lifespan, *āyus* is the word used for the span, but occasional *jīvita* or *prāṇa* are seen instead. Among 16 references throughout the *sūtrasthāna* where lifespan has at least one other accompaniment, the following appear twice: voice (*svara*), youth (*vayas*), sense faculty (*indriya*), digestive faculty (*agni*), health (*ārogya*), and nourishment (*bṛṃhaṇa* and *puṣṭi*). Those that appear three or four times are: complexion (*varṇa*), semen (*śukra*), flesh (*māṃsa*), and intelligence (*buddhi*). Two qualities were found as quite frequent accompaniments, appearing 8 and 9 times respectively: strength (*bala*) and happiness (*sukha*). Those promoting this medicine were wise enough to know that a long life without happiness is of little worth.[348]

Strength is an interesting second, beating out intelligence and health. One might suppose, though, that strength would support good health. Also, it might find its way onto the list because bodily weakness is commonly associated with old age and seen as an impediment to successful treatment. Though we might initially think of aging as a recent concern, we see it already exists as medical topic here. As distinct from descriptions of

[348] As banal as that statement sounds, in the modern Western iteration of medicalized end-of-life care, this simple concept can be lost sight of.

what extends life, therapies or diets that promise a delay, reduction, or absence of aging are also seen in this section.[349]

NIDĀNASTHĀNA

The *nidānasthāna* follows the *sūtrasthāna*, and, as opposed to it, does not discuss lifespan. This may be due to the particular focus of the section. A *nidāna* can be a rope used to tie a calf,[350] and medically, in a sense, it is also such a rope. That is, by inquiring into the causes of a disease, it ties together the characteristics of a single disease, distinguishing it from others. It is an exploration in order to grasp an illness. Thus, this section explores remote and proximate causes, symptoms, complications and gives general treatments for the eight major diseases.

Also because of the nature of the topic, as might be expected, death (*mṛtyu*) and dying (*maraṇa*) make their appearance in relation to the outcomes of these specific diseases such as those under the general category of urinary diseases or wasting diseases.[351] Those examples do not provide any additional insights into the nature of death; however, the language used in relation to fever is worth taking a look at.

Fever is the first of the diseases discussed in this section, and is indicated as the most important, being called king of diseases.[352] Beings (*prāṇa-bhṛta*) are said to be born with it (*jāyante*) and to die with it (*mriyante*).[353] It takes life from all beings: *sarva-prāṇa-bhṛtāṃ prāṇa-haro*.[354] And in the end, truly fever seizes life: "*sarva-prāṇa-bhrtāṃ ca jvara eva ante prānān ādatte*."[355] In each of these cases, the term used for living

[349] CS. Sū.5.89;7.49; and 16.19.
[350] Monier-Williams 486.
[351] CS. Ni. 4.51 and 6.9 for example.
[352] Ibid., 1.35.
[353] Ibid.
[354] Ibid.
[355] Ibid.

beings is *prāṇa-bhṛta*. *Prāṇa* means life in a general sense, but more specifically it means vital air, respiration, breath. *Bhṛta,* formed from a past participle of the verbal root *bhṛ,* means that which contains, carries, holds. The living being in this passage is literally the bearer of breath. Breath is likewise implicated in the phrases representing death. *Prāṇa-hara* is the seizing or taking away of breath, while *prānān ādatte* pairs the finite verb from *ā√dā* with the accusative plural of *prāna,* forefronting the meaning of breath given that an individual has multiple breaths to lose at one time, but only one life. The importance of this association is what it tells us about the nature of death. Here emphasized very strongly is that to die is to stop breathing, so much so that living beings are described as vessels in regard to breath.

Death also makes an appearance in this section in relation to comments on the timing of treatment.

> *sādhyo 'yam iti yaḥ pūrvaṃ naro rogam upekṣate* /
> *sa kim cit kālam āsādya mṛta eva avabudhyate* //
> *yas tu prāg eva rogebhyo rogeṣu taruṇeṣu vā* /
> *bheṣajaṃ kurute samyak sa ciram sukham aśnute* // [356]

This can be translated as follows:

> A man who initially disregards a disease thinking "This is curable,"
> only later, having arrived at the time, becomes aware he is dead man.
> But he who, in advance of diseases or when they are just arisen,
> takes the proper remedy will be happy for a long time.

This reiterates the need for early treatment mentioned above, but goes further than the idea of needing to catch the pot falling through water. Here the pot needs to be caught before it falls. The implication this has for medicine is that for death to be successfully avoided, one must be able to see a long way down the road of predictive signs. Signs and symptoms will be discussed more fully later on, but here in this section we are introduced

[356] Ibid., 5.12.

to those signs which come before an illness: *pūrvarūpa.*[357] In addition to this we are given a list of synonyms for the symptoms showing themselves at the time of the illness: *liṅga*, *akṛti*, *lākṣaṇa, cihna, saṃsthāna, vyañjana,* and *rūpa.*[358]

Above we learned that even the best physicians do not trump curability, but in this section we do learn of some extenuating circumstances for what should be curable. It is summarized in the second chapter of the *nidānasthāna: preṣya-upakaraṇa-abhāvād daurātmyād vaidya-doṣataḥ // akarmataś ca sādhyatvaṃ kaś cid rogo 'tivartate*.[359] So: A disease loses its curableness from [the causes of] the absence of an attendant or instruments, from depravity [of the patient], from a physician's deficiency, and from lack of treatment. All but the first pair are repeated elsewhere in the *sthāna* if you take the depravity (*daurātmya*) of the patient to be equal to *apacāra,* which can mean improper conduct or an unwholesome regimen.[360] In addition to this shifting of curable to incurable, an extenuating factor is given which can drive a disease in the opposite direction. In relation to a wasting disease, eleven symptoms are given. A patient with only a few of these but who is weak is said to be incurable, while a strong patient who has many of these symptoms is said to be curable. Granted in this case neither of the patients have "*ariṣṭa*", that is, signs indicating approaching death.[361] This, though, illustrates the impact of strength upon the prospect for a long life.

From this discussion we can conclude that in patients of equal strength that more symptoms are worse than fewer symptoms, driving a disease in the direction of incurability. However, the definition of incurable and curable rest on more than just

[357] Ibid., 1.8.
[358] Ibid., 1.9.
[359] Ibid., 2.cd21-ab2.2.
[360] Ibid., 5.9 and 8.22.
[361] Ibid., 6.14-16.

patient strength and the severity of manifestation of a particular disease. It is affected by the availability of specific cures. In regard to different varieties of a hemorrhagic disease, for example, we are told in regard to subtype: *sādhyaṃ lohitapittaṃ tad yad ūrdhvaṃ pratipadyate* / *virecanasya yogitvād bahutvād bheṣajasya ca*.[362] That is: The hemorrhagic disease *lohitapitta* which is in the upper part [of the body] is curable because of a connection with purging and from an abundance of medicines. This can be contrasted with another variety of which it is said: *raktaṃ tu yad adhobhāgaṃ tad yāpyam iti niścitam* / *vamanasya alpayogitvād alpatvād bheṣajasya ca*.[363] In other words: The hemorrhagic disease *rakta* which is in the lower part [of the body] is called *yāpya* because of little relationship with vomiting and a scarcity of medicines. This is interesting because the statement about few medicines implies there are indeed some and that they are expected to be applied even though *yāpya* is one of the two categories of incurable types of diseases. This is further supported by the following statement: *tatra asādhyaṃ parityājyaṃ yāpyaṃ yatnena yāpayet* / *sādhyaṃ ca avahitaḥ siddhair bheṣajaiḥ sādhayed bhiṣak*.[364] This translates as: Therefore, the incurable is to be forsaken; a careful physician should support the *yāpya* with effort, and the curable should be accomplished with established remedies. Yet, when given the following statement, a conflict appears: *teṣāṃ sānnipātikam asādhyaṃ jñātvā na eva upakrameta*.[365] This statement is seen in the context of discussing the curability of varieties of another disease, *gulma*, which involves abdominal swelling. It translates as: Among those, having ascertained [one as] the incurable *sānnipātika* [type], one should not ever treat it. 'Not ever' leaves no wiggle room. Yet, *sānnipātika* is a case where all three humors are aggravated, and in any

[362] Ibid., 2.12.
[363] Ibid., 2.15.
[364] Ibid., 2.27.
[365] Ibid., 3.16.

disease type marks it as grave.[366] So we may reasonably conclude when statements are made about not treating the incurable, it is effectively meant only in regard to the absolutely incurable variety (the *anupakrama*s), not the entire category of the incurables. It is curious, however, that two categories were made rather than three, given that the injunction against treatment references, again and again, only the overall category. In addition to this, generally when a threefold category is mentioned rather than four, it is not divided as above into curable, incurable, and manageable, rather it just drops the *yāpya.* This results in easy to cure, difficult to cure, and incurable. In this division, *yāpya* would presumably fall into difficult to cure.

VIMĀNASTHĀNA

The *vimānasthāna* follows the *nidānasthāna*, making it the third major section in the CS. It could perhaps be given the title: *The Measure of Medicine.* For, if the *nidāna* portion of the text could be called a rope, this would be a yardstick. For one thing it gives literal measurements, such as the optimal dimensions of body parts. But it is also a measure of medicine in so far as it lays out the component parts the vehicle of medicine. As with the information on the human body, which moves from one end to the other in order to encompass the whole, this portion of the treatise outlines the necessary factors for understanding and practicing medicine. Thus, it includes information about texts, students, and teachers. It also deals with systems of classification, making the point that various modes of classification do not nullify the others—an interesting proposition to

[366] Wujastyk translates this term as humoral colligation which nicely captures the senses of both collision and enduring contact coming from the verbal root √*pat* with its two prefixes *sam* and *ni*. It is not merely that all three humors are involved but that they appear to have an integral effect greater than the sum of the parts (see "Models of Disease in Ayurvedic Medicine," p. 2).

mull when trying to determine what might be encompassed, or not, at any given point in time by the term incurable.[367]

In regard to students, death comes up, not surprisingly, when they are told not to treat those on the verge of death (*mumūrṣu*). This is not new information. In the *sūtrasthāna* physicians were warned that treating such patients could ruin their career. What is noteworthy in this case is the general context in which the injunction appears. One is advised not to treat any of the following people: "*anapavāda-pratīkārasya adhanasya aparicārakasya vaidya-māninaś caṇḍasya asūyakasya tīvra-adharma-arucer atikṣīṇa-bala-māṃsa-śoṇitasya asādhya-rogopa-hatasya mumūrṣu-liṅga-anvitasya ca iti*."[368] That is, one is not to provide care to those who are: irremediably adversarial, those lacking wealth, those without an attendant, those merely fancying themselves as physicians, ones who are violent, discontents, those who enjoy being extremely lawless, those whose blood, strength, and flesh are severely depleted, those who are afflicted by incurable disease, as well as those who are showing signs of nearing death. Presumably the concern about someone without an attendant is in regard to female patients. Related to that, one thing to notice about this list is that it is very similar to another offered in a later chapter of the *vimānasthāna* (Vi.8.13) with the only differences being that the later one omits the comment about attendants and about those lacking wealth. Perhaps this is because these two items are seen as especially necessary pointers for students, but not otherwise needing to be emphasized. Also noteworthy is that danger to fame and wealth, though mentioned previously in connection with the treating of those with incurable illnesses, is not mentioned here. Rather, students are told earlier in this passage that the

[367] CS. Vi.6.4.
[368] Ibid., 3.45.

path to fame and wealth is tied to brahmans, cows, and so forth.[369] But most striking is the company the dying keep in this list—with those who are violent, and lawless, and political outcasts. It moves away from arguments of efficacy, rather coloring death and serious illness with a moral hue by means of the association.

This taint is found elsewhere in the section in a discussion on epidemics. There Ātreya is asked what the basis of these sweeping diseases is and he answers that the root is lawlessness (*adharma*) and previous wrongdoings (*asatkarma-pūrvakṛta*), i.e. in a prior life.[370] The group is seen to share in like karma (*sāmānyaṃ karmaṇām*) which leads to a like death (*mṛtyu-sāmānyaṃ*).[371] Those who are eligible for treatment under such conditions are those of whom there is not the certainty of the dreadful death of those times: "*ity etad bheṣajaṃ proktam āyuṣaḥ paripālanam / yeṣām aniyato mṛtyus tasmin kāle tasmin sudāruṇo*."[372] That is, one who is not seen to partake in the common karma of the general population. This person is afforded the care which is spoken of as a protection of life (*āyuṣaḥ paripālanam*.) Because these individuals who are not wicked still need medical protection in times of epidemic, it means that good karma only goes so far. But how do physicians know who might share in the previous misdeeds and therefore be destined to die? Inference (*anumāna*) is said to be the mode of knowledge used in determining the waning of life (*āyuṣaḥ kṣayam)* by means of the signs and symptoms of approaching death (*ariṣṭa*).[373] In other words, there are prognostic indicators a physician can rely on to help him determine who to treat or not treat. In the case of epidemic,

[369] Ibid.
[370] Ibid., 3.20.
[371] Ibid., 3.13.
[372] Ibid., 3.18.
[373] Ibid., 4.8.

curability based on disease type is not a feasible determining factor given that all are impacted by a similar affliction.

Death also comes up in this section, as we have seen in others before, in relation to improper treatment. For example, we are told:

> *sattvādīnāṃ vikalpena vyādhirūpam atha āture* /
> *dṛṣṭvā vipratipadyate bālā vyādhibalābale* //
> *te bheṣajam ayogena kurvanty ajñānamohitāḥ* /
> *vyādhitānāṃ vināśāya kleśāya mahate 'pi vā* //[374]
>
> [Inept physicians], having perceived in sick ones the form of an illness via the ignorance of their [own] minds, etc., confuse the mild and severe types—these simpletons of faulty reasoning give ineffectual remedies leading to the death or long suffering of the ailing.

That is to say, because their minds are of poor quality, they cannot practice medicine effectively. But *sattva* also participates in the moral, for one of highly developed *sattva* has not only a good mind but excellent virtue and wisdom. Furthermore, we find this quality, which partakes of both the intellectual and the moral, is one which affects both doctors and potential patients. For it is said those with superior *sattva* are more disease resistant, and those *hīna-sattva* (with a feeble mind/lack of wisdom and virtue) may take fright so easily and completely that it results in death.[375]

The moral aspect impacting death brings the text and us back to the question of lifespan. Ātreya goes to the very first epoch to answer questions raised by the topic of epidemics. He points out that the richness of that earlier time period allowed some to overindulge which spiraled into dharmic shortcomings. This in turn negatively impacted lifespan and set things into an arc of gradual, incremental decline. In regard to lifespan, this preceptor states that: *saṃvatsara-śate pūrṇe yāti saṃvatsaraḥ kṣayam*—out of [each]

[374] Ibid., 7.6.
[375] Ibid., 8.119.

full hundred years [time], one year is lost.[376] So, though the *vimānasthana* also gives one hundred as the standard human life for this epoch, it is an ever shifting, ever diminishing standard.[377] But the difficulties in the case of epidemics do not come from this, rather they come from the differences in the term of life between individuals.

Ātreya is eager to point out that lifespan is not simply predetermined. He states: *iha agniveśa bhūtānām āyur yuktim apekṣate / daive puruṣakāra ca sthitaṃ hy asya bala-abalam*.[378] So: Here, Agniveśa, the lifespan of beings is based upon a combination; it rests in fate along with human effort—for from that [combination] comes its strength or weakness. This echoes the *dharma* and *pūrvakṛta*, the current and previous doings, which affect one's position in times of epidemics. This combination is needed because as he points out otherwise, *yadi hi niyata-kāla-pramāṇam āyuḥ sarvaṃ syāt tadā 'yuṣ-kāmāṇām na mantra... prapāta-giri-viṣama-durga-ambu-vegāḥ*.[379] Otherwise: Because if every life would have a fixed length of time, then those desiring life [would have no need of] mantras... [have no concerns about] currents of water in difficult passages on rough mountain cliffs. In other words, if lifespan were simply, immovably fixed, all religious practices would serve no purpose toword the end of providing a long life, and man would need have no caution in regard to wild animals or natural dangers. Especially the first of these would be troublesome for medicine because one of the ways it has pointed to its importance is its ability to enhance the length of life for the purpose of performing religious duties, especially those leading to heaven. Medicine gets to have a higher purpose in so far as it can link itself to the soteriological.

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[376] Ibid., 3.26.
[377] Ibid., 8.122.
[378] Ibid., 3.29.
[379] Ibid., 3.36.

The story of the decreasing of lifespan as an inevitable part of the progression of epochs recalls the earlier analogy of life and time: Because it comes into being it perishes. But this story means that time does not just mark an axis where life ticks away year after year, but it gives human lifespan in general an arc with a downward slope, perpetually falling away. Furthermore, time makes another appearance here in conjunction with death, and that is the introduction of the concept of a 'timely' death.[380] The preceptor uses the example of a cart or carriage:

> *yathā yāna-samāyukto 'kṣaḥ prakṛtyā eva akṣa-gunair upetaḥ sa ca sarva-guṇa-upapanno vāhyamāno yathā kālaṃ sva-pramāṇa-kṣayād eva avasānaṃ gacchet tathā ''yuḥ śarīra-upagataṃ balavat prakṛtyā yathāvad upacaryamāṇaṃ sva-pramāṇa-kṣayād eva avasānaṃ gacchati sa mṛtyuḥ kāle*.[381]
>
> Just as the axle of a cart in excellent condition endowed with the good qualities of an axle and being driven with all the right qualities would go to its stopping point according to the time of its own [proper] duration of diminution, so also life furnished with a strong body in excellent condition being tended in accordance with propriety goes to its stopping point according to the time of its own [proper] duration of diminution: That is death at the [right] time.

The example of the cart brings to mind Oliver Wendell Holmes's "The Deacon's Masterpiece or, the Wonderful 'One Hoss Shay': A Logical Story" in which a cart is built to last 100 years to the day. All the pieces were put together so that it would wear exactly evenly, no part giving out sooner than another. He begins:

> Little of all we value here
> Wakes on the morn of its hundreth year
> Without both feeling and looking queer.
> In fact, there's nothing that keeps its youth,
> so far as I know, but tree and truth.[382]

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[380] Or if one wants to argue that the idea is intimated elsewhere, this at least is the first time in the CS where the phrase is employed.
[381] CS. Vi.3.38.
[382] Oliver Wendell Holmes, *The Autocrat of the Breakfast Table,* Boston: Houghton Mifflin, 1883, 254-5.

When the carriage reached the end of its hundreth year, "it went to pieces all at once— / All at once, and nothing first— / Just as bubbles do when they burst."[383] There is a meditation upon death in this poem just as in the more overt example above. However, our question is related to *mṛtyuḥ kāle,* which beyond this passage can also be seen compounded as *kāla-mṛtyu.* What exactly is meant by a timely death? Is one meant, like the One Hoss Shay, to drop dead on the final day? But more pertinently, what is its opposite? What is an untimely death, *akāla-mṛtyu*?

The passage gives us some help with that. It goes on to describe a cart or carriage which is overloaded and driven poorly on bad roads, the human equivalent of which is said to lead to *mṛtyuḥ akāle.*[384] This includes things such as poor eating habits, keeping bad company, etc. In addition to this we are given another example of an untimely death following right after the first: *tathā jvarādīn apy ātaṅkān mithya-upacaritān akāla-mṛtyūn paśyāma iti*.[385] That is: Likewise, we consider fevers and so forth as well as mental disquietude which are improperly treated as [causing] untimely death. What both these examples share, along with the deaths mentioned above which could be caused by accidents such as falling off a mountain, is a sense of avoidability. They did not have to happen. But what about those who are properly treated and yet still die? Here we should recall that Ātreya claimed that no curable disease properly treated would not be cured. Then what of the incurables ones? Those, in theory at least, are not treated. Does this possibly reflect the physician's idea that these people with incurable illnesses are dying at their own right time? Perhaps this is also what is reflected in English sayings regarding one's time being up, or one's time having come. If so, this would represent the measure

[383] Ibid., 256.
[384] CS, Vi.3.38.
[385] Ibid.

of a specific individual's life versus the ideal span. It is noteworthy that the fact that death may be timely or untimely, points to the fact that time and death are not equated here. The fact that time is a qualifier of death, illustrates a degree of independence. Death has some power to run according to its own clock. It is not locked to an external measure.

As we have seen, measure also comes up in this chapter in relation to the size of body parts. The closer one comes to the ideal, the better it is said to be for longevity. Incidentally, the characteristic of happiness along with several other positive traits are also said to accompany long life when one has the proper measurements.[386] Once again, long life is linked with happiness.

In regard to peace and happiness, a rather surprising piece of advice is given to students in regard to those nearing death: *hrasitaṃ ca āyuṣaḥ pramāṇam āturasya jānatā 'pi tvayā na varṇayitavyaṃ tatra yatra ucyamānam āturasya anyasya vā 'py upaghātāya saṃpadyate*.[387] They are told: And even if you understand the curtailed length of the life of the sick one, it is not to be described; in the case where that is done it leads to damage happening to the sick one or even to another one. So, a student is not supposed to let a dying person, or those with him, know that death is impending. This seems like it would be especially difficult to manage in conjunction with the advice that the dying are not to be treated. Once a physician comes to understand that the patient is dying, how does he suddenly exit the scene without that action alerting the family that the patient is dying? Would they not be aware that the doctor is leaving, so death is coming?

ŚĀRĪRASTHĀNA

In the *śārīrasthāna* we move from measuring body parts to putting the parts together—by which I mean this is a section that pertains to reproduction. Embryology

[386] Ibid., 8.117.
[387] Ibid., 8.13.

might give too modern a ring, yet there is a fine focus on the development in the womb and what factors positively or negatively affect that process.[388] If life and death may be called Siamese twins, birth and death would be fraternal ones. That is, they don't look much alike, but they are often seen together. Especially in premodern times, pregnancy and childbirth were perilous periods for both mother and child. To make two bodies in a place where there was only one is never trivial. Perhaps that is why the title of this section refers to body rather than birth.

Though the evidence is not conclusive, there is some suggestion that the word for body comes from the verbal root *śṝ*.[389] This verb means to "wound", "kill", "tear or split into pieces."[390] A masculine noun formed from it, *śara*, means an injury or arrow, among other things. The adjective *śari* means hurting or hurtful. Thus, the *Uṇādisūtra* defines *śarīra* as "that which easily moulders or is dissolved."[391] It is true that a body is that which can be hurt or destroyed. Nevertheless, Whitney suggests *śarīra* may come rather from the verbal root √śri / √śṛ.[392] This root means to "resort to", "lean on", "make use of."[393] It emphasizes the body as a prop versus the previously proposed etymology which points to the body as vulnerable and mortal. Both seem plausible.

Likely due to the previously stated fact that pregnancy is a time that shows such vulnerability of bodies, the *śārīrasthāna* advances the ongoing conversation about death and time. Ātreya begins by presenting a couple of wrong views, followed by his own:

> *yaḥ kaś cin mriyate sa kāla eva mriyate na hi kāla-cchidram asti ity ete bhāṣante / tac ca asamyak / na hy acchidratā sacchidratā vā kālasya upapadyate kāla-sva-*

[388] See for example Martha Selby, "Narratives of Conception, Gestation, and Labour in Sanskrit Ayurvedic Texts," *Asian Medicine* 1, no. 2 (July 2005): 254-75.
[389] *śārīra* means related to the body, corporeal, and *śarīra* means the body or a corpse.
[390] Monier-Williams, 1019.
[391] Ibid., 995.
[392] Whitney, *The Roots, Verb-forms and Primary Derivatives,* 179.
[393] Monier-Williams, 1025.

> *lakṣaṇa-sva-bhāvāt / tatra āhur apare yo yadā mriyate sa tasya niyato mṛtyu-kāla sa sarva-bhūtānāṃ satyaḥ sama-akriyatvād iti / etad api ca anyathā 'rthagrahaṇam / na hi kaś cinna mriyata iti samakriyaḥ / kālo hy āyuṣaḥ pramāṇam adhikṛtya ucyate / yasya ceṣṭaṃ yo yadā mriyate sa tasya mṛtu-kāla iti tasya sarve bhāvā yathāsvaṃ niyata-kālā bhaviṣyanti tac ca na upapadyate...*[394]

This may be translated as follows:

> Some say whoever dies dies only at the [right] time, for time has no cracks. That is not correct. For it is not possible for time to be in either seamless or broken due to the particular nature of the particular characteristics of time. In this regard, others have said whenever one dies that is the fixed time of his death. It [time], from being equally inactive, is realized for all beings. And this also is an incorrect grasp of the meaning because there is not equal treatment for whomever dies. Time is spoken of in relation to the duration of [the standard human] life. If it is said one dies [only] at the [right] time, [then] of that one, his every gesture will be happening according to its own fixed time. That is not possible.

The first thing this dense passage makes us aware of is that there are multiple points of view on the issue even if only one is considered correct. The initial opponent wishes to make the point that every death has to be timely because of the nature of time. Time has no gaps, so everything has to happen in the framework of time rather than outside of it, and, in that sense, he claims all deaths must therefore be timely. Ātreya argues against this on the grounds that this just is not in the nature of the characteristics of time. It is not the kind of thing which can have a fissure or not. The second argument attempts to call all deaths timely using a different characteristic of time, its indifferent presence. It is there for everyone equally, so everyone to an equal extent dies at the so-called right time. Ātreya argues against this, saying that time does not treat everyone equally so to speak. He gives examples of the coming of rains or fruiting of plants which can be said to happen at the right time or the wrong time. In this sense it is as though events and time were on parallel tracks and any particular event might be keeping pace with time or not,

[394] CS Śā.6.28. Note: the Acharya edition has *pramāṇam adhikṛtya* where Sharma has *pramāṇadhikṛtya*. I am going with the former reading.

whereas in the argument prior to it (and, in fact, really in both the prior arguments), it was as if the events were running on the track of time, so inevitably and equally marked by it. The concern this preceptor has about the events-on-a-single-track of time model is that then every event in every life would have to be fixed.[395] In such a situation no one could do something at the wrong time, and even events of nature could not happen at the wrong time. And, as he has previously expressed, if everything was fixed the knowledge of things such as factors that enhance longevity, and really the whole of this medicine predicated upon extending life, would have no truth, no validity. Related religious practices would end up being invalidated as well.

A particularly useful nugget of information in the passage above is the statement: *kālo hy āyuṣaḥ pramāṇam adhikṛtya ucyate,* or that time is spoken of in relation to the measure of life. Here the implication seems to be in relation to the standard duration of a full human life. Taken all together this means there is no such thing as a fixed individual lifespan at any point. The scale of previous actions and current actions, though perhaps never giving equal weight to past and present ones, continues to shift, approaching the full span more nearly at times, falling further back at others. But the question that is not answered is why in the case of epidemics, or incurable disease, or the dying, patients are not treated. A kind of answer was given when fame and wealth were said to be at stake. The lifespan may not be fixed at a period of less than a full lifespan, but it would be too risky for one's livelihood to treat people who are more likely to die than not. At times arguments of efficacy may also be implied, i.e., don't try to do what cannot be done. But what is not given is a philosophical justification of why they cannot be saved. Keeping the image of a balance-style scale in mind, the case may just be that at some point a

[395] Note that the word being used in this passage for "fixed" is *niyata*, the same term seen in the discussion of lifespan in the first section of this chapter, supporting that reading.

certain load of karmic weight becomes too great to feasibly overcome. This would agree with the concept seen previously that diseases must be treated in a timely manner or they get out of hand. The past karma cannot be changed, but perhaps in such cases there is time for the applying of a counterweight of sufficient force. Whatever the case may be, the relationship with time appears to change for those nearing a full lifespan, for we are told: *kālasya pratiṇāmena jarā-mṛtyu-nimittajāḥ / rogāḥ svābhāvikā dṛṣṭāḥ sva-bhāvo niṣpratikriyaḥ*.[396] Thus: The diseases seen with the advancing of time producing the signs of old age and death are of our own nature; what is one's nature is irremediable. These inescapable ailments do not appear to be running along time on some parallel track. These are diseases *of* time, not just in relation to time. It is as if the track of event and track of time at this later stage of life merge and become one and the same. Death can no longer be outpaced. There is no further rail to run on. The term *niṣpratikriya* slips from its sense of irremediable, through its sense of what-cannot-be-remedied, to leave us at the meaning incurable. Old age is incurable, at least as implied here.

In this section on birth, we learn still more about death. Signs of life—which marked by absence show death—are given, including respiration (*prāṇāpāna*), the twinkling of eyes and so forth (*nimeṣādya*).[397] An understanding of the potential of one's own death is also included as a sign of life, phrased as understanding the self as constituted by the five element (*pañcatvagrahaṇa*).[398] The body with its soul departed is described thus: *śarīraṃ hi gate tasmiñ śunya-agāram acetanam / pañca-bhūta-avaśeṣatvāt pañcatvaṃ gatam ucyate*.[399] For when it goes, the body is an empty house without consciousness; it is said to be gone from the previous state of a vigorous body to

[396] Ibid., 1.115.
[397] Ibid., 1.70.
[398] Ibid.
[399] Ibid., 1.74.

the state of five elements. Actually, the term for body used in the second half of the verse, *bhūta-āvaśa*, is more complex than *śarīra* which appears in the first half. It is formed from a compound literally meaning the abode of being. In this manner it echoes the empty house in the first half but with one which is full. Furthermore, it has associations of being a house of the five elements.[400] In that sense, it connects to the *pañcatva* which follows. This term for the state of the five elements is interchangeable with the word death. It can mean simply the five elements, the collective grouping of them, or the separation of them into the individual elements. Death is when those elements lose their enlivening factor and then part ways. The body which held the five together during life at death allows for their separation. An additional term for death found in these discussions is *viyoga*, disunion or separation, which thereby also emphasizes dying as a coming apart of constituents.[401] The equation of death and disbanding is reflected in terms of the universe via the word for epoch, *yuga*, which means not only an age, but a yoke. It is a duration of time in which constituents are held together, just as in the span of life. Thus the destruction of the world at the end of the final epoch is *yuga-anta*—an unyoking. Likewise, when what persists after one life in one body which then moves to another is described, there is an emphasis on wholeness. The *ātman* is characterized as being: *śāśvatam arujam ajaram amaram abhedyam acchedyam* —eternal, sound (as in not breaking, not festering), not aging, undying or immortal, not to be broken, and not to be cut.[402] All but the first of these are phrased as a negation, an affirmation of what the *ātman* is not, mirroring like a backhanded compliment all that life is troubled with.

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[400] Monier-Williams, 716.
[401] CS, Śā. 5.8.
[402] Ibid., 3.8. The distinction between not dying and being immortal is an important one and will be discussed at the end of the section on the āyurvedic texts.

Given that the *śārīrasthāna* is about pregnancy, death obviously also is found in association with those actions or items which increase danger to mother or child. One cause attributed to early miscarriage is the entrance of night-rovers (*rajanīcara*) or demons into the womb to consume the *ojas,* the precious vital fluid whose few crucial drops are located in the heart. Presumably the entire of the fetus is swallowed with the *ojas* because this is meant to account for the fact of no body parts being expelled in these cases. Ātreya discounts this as a possibility, arguing rather for a false pregnancy having occurred which gives misleading signals indicating the woman is pregnant when indeed she is not. He argues: *garbhaṃ hari-āyur yadi te na mātur-labdha-avakāśā na hari-āyur-ojaḥ*.[403] In English: Why not, if they take the life of the fetus, do they not, with the opportunity to get the mother [as well], take the vital fluid [supporting] her life? The preceptor finds it illogical that such demons would only feast on the contents of one heart in a two-hearted individual (*dvi-hṛdaya*), a common term used for pregnant women who embodies two such organs at the time. In Ātreya dismissing demons as a cause of this type of miscarriage, we see nevertheless that it must have been an idea of some prevalence (as later āyurvedic writings also support.)

Death in the *śārīrasthāna* is also remarkable because, as Selby has noted, women carrying a dead fetus (*mṛta-garbha*) and undergoing surgical removal of such are given various types of wine as anodyne. The wine is said to be for *koṣṭha-śuddhy-artha*, *arti-vismaraṇa-artha*, and *praharṣaṇa-artha*.[404] That is, it is said to be for the sake of clearing out the womb, for the sake of forgetting pain, and for cheering her up. *Vismaraṇa* coming from the verbal root *vi-smṛ* does not necessarily mean just forgetting in the sense of pain

[403] Ibid., 2.10. Note: this volume has *māur* where the Acharya has *mātur*. Given that the first of these is not possible, I go with the second.
[404] Ibid., 8.31.

which has passed; it also encompasses "to be unmindful of", thus dealing with any continuing pain.[405] This may be the only place in the entire treatise where a painkiller is recommended. The word used here for pain, *arti,* only occurs five other times in the entire text.[406]

The implication of this for the *yāpya* form of the incurable diseases is that treatment for pain is not an essential part of care offered to patients—at least in so far as recorded in this encyclopedic medical treatise. Perhaps this means there was another group of people such as family members or another profession that would have taken care of pain. Perhaps the assumption was that sick people, especially those chronically ill, would self-medicate somehow. Or perhaps the assumption was that one would just bear the pain. At any rate, understandably so, curability is not much of a topic in a section on pregnancy. One way or another it is a medical issue that takes care of itself. When contractions come, one does not have the option of saying: "No, thank you. I'll sit this one out." Still, curability does get a mention in that if newly delivered mothers get ill, they are automatically difficult to cure (*kṛcchra-sādhya*) or incurable (*asādhya*) due to the depletion they have undergone.[407]

Likewise, longevity is not a big focus. Death may be too pressing a concern for considerations of the long term to come up. On the tenth day after birth, though, the child is to be examined for indications or a good or bad lifespan. A description of the proper appearance of body parts is given, moving from head to foot, curiously going the

[405] Monier-Williams, 951.

[406] Digitial Corpus of Sanskrit word frequency tool. This is not to say that other words for pain are not used, such as *vedanā* which is seen 51 times or *ārti* at 11, though the latter is not always used in those instances in the sense of pain. Words such as *dukha, kleśa* and *vyathā* which range from suffering, disquietude, distress into pain *per se* are also seen with some frequency (52, 21, 16 times respectively.) Nevertheless, clear instances of and discussion of bodily pain occurs less frequently than one might expect. The association of pain with death as seen at XXIII, 141 will be discussed more fully in relation to the Unani texts.

[407] CS, Śā. 8.49.

opposite direction the body was examined in in the last section. When these conform to the norm, lifespan is said to be good. In addition to these physical signs, normal actions in regard to suckling, sleep, and digestion are said to be good indications—signs that we still look to today for determining soundness.[408] For example, in the not too distant past it was not uncommon to see written on paperwork requesting genetic testing on newborns the letters FLK. The practice, not meeting the standards of political correctness, no longer exists. FLK stands for Funny Looking Kid. It was not used in those cases of gross or multiple physical abnormalities. The case would be more subtle. For the physician something, especially in regard to facial features, was off—location, size, general composition. It was something hard to exactly put a finger on, but often turned out to be significant. In the case of severe and multiple congenital abnormalities, genetics results are often used to determine treatment approaches. If the newborn baby's chromosomes show an abnormality indicative of inescapable death in the short term, heroic measure such as open-heart surgery would not be performed. In modern terminology, a severe underlying chromosomal abnormality would determine incurability and lead to the conclusion that such a one should not be treated.

INDRIYASTHĀNA

As we move from the section on birth so filled with references to death, we come to the *indriyasthāna* where death is the main topic. *Indriya* is a word which can mean bodily power, though most often it refers to the power of the senses via their capacity to function properly. The eye, ear, nose, tongue, and skin are the organs employed. However, their presence in this part of the text is not in the context of how they normally function, rather the section focuses on what signs, linked to the body and beyond, may be

[408] Ibid., 8.51.

used for medically predictive purposes. The senses play a key role in this respect, the reason for which will be explored below.

Earlier we encountered signs and symptoms that come before an illness and predict its approach (*pūrva-rūpa*), and encountered the view of curable and incurable diseases. The incurable, as you will recall, were further divided into a more severe and less severe type. Incurable did not necessarily mean fatal, or at least immediately so, but was associated with the proscription not to treat. Here the stakes are higher. The prognostic signs examined are related to determining the approach of death. Such signs are given the name *ariṣṭa*, as previously noted, and with the exception of a handful of positive indications given in the last chapter, this section is entirely focused on these harbingers of the end.

One description given to these indicators is: *kriyā-patham atikrāntāḥ kevalaṃ dehaṃ āplutāḥ / cihnaṃ kurvanti yad doṣās tad ariṣṭaṃ nirucyate*.[409] The doṣas [meaning the aggravated humors], having gone beyond the bounds of remedying, overwhelming the entire body, leave marks which are the signs of approaching death, it is said. This definition holds the key to why such attention is spent on the *ariṣṭa.* They are "beyond the bounds of remedying." As with the earlier incurable diseases, then, one gets the sense that nothing can be done for these unfortunates who are on the verge of death, so nothing will be done. But we do not need to stick with vague intuition. The question is handled explicitly in the sixth chapter, about halfway through the section. Agniveśa raises it: *katamāni śarīrāṇi vyādhimanti mahāmune / yāni vaidyaḥ parihared yeṣu karma na sidhyati*.[410] In other words: Which diseased bodies, o great sage, are those a physician ought to shun—of which no action succeeds? The optative verb being used for shun,

[409] Ibid., In. 11.29.
[410] Ibid., 6.3.

pari√hṛ, is a strong one. It means "avoid", "abandon", "desert."[411] Why Agniveśa might be speaking in terms of bodies rather than diseases or persons will be left an open question at the moment. First, more needs to be said of the sentence as a whole. It is a blunt statement, even in the form of a question, that there are certain people who are to be vigorously avoided. Furthermore, it is not terribly softened by the argument of efficacy which is attached, the tag qualifying the diseased bodies as those "of which no action succeeds." The question could be rephrased as: Who are these people we should avoid who, anyway, couldn't be helped?

This is not new. It is consistent with the instructions given to students and the general recommendations not to treat incurable diseases. What is different here is the frequency and intensity of the injunction. In this chapter alone, we are reminded ten times not to treat the dying. Moreover, this chapter consists of a mere twenty-five verses. Thus, proportionately it is in extremely high occurrence. Still, one could argue that Ātreya was asked and is just giving a thorough answer; it is the topic at hand, and he enumerates situations where the individual will die and should not be treated. For example, he instructs: *uro-yukto bahu-śleṣmā nilaḥ pītaḥ sa-lohitaḥ / satataṃ cyavate yasya dūrāt taṃ parivarjayet*.[412] That is: One who is constantly expressing a lot of phlegm which is blue, yellow, or red from his chest should be forsaken from afar. The verb is an optative from a causative of *pari√vṛj*. Similar in meaning to *pari√hṛ* seen above, this gets extra emphasis from the *dūr*. You do not even come near a case like this. Another example is: *hikkā gambhīra-jā yasya śoṇitaṃ ca atisāryate / na tasmai bheṣajaṃ dadyāt smaranna-ātreya-śāsanam*.[413] So in English: Recalling the instructions of Ātreya, one should not give

[411] Monier-Williams, 551.
[412] CS, In. 6.15.
[413] Ibid., 6.7.

medicine to [an individual] who has a hiccup produced from deep within and blood being expelled [with diarrhea]. This blanket statement, using the term *bheṣaja*, eliminates the possibility of employing any mitigating therapy or substance whatsoever in this case.

Also not new is the appeal to fame, wealth, and knowledge. This was initially seen in the eighth verse of the tenth chapter of the *sūtrasthāna*. Now one is told that through learning the signs of death described in this section, it follows that: *tathā hi siddhaṃ ca yaśaś ca śāsvataṃ sa siddha-karmā labhate*.[414] In other words: In that very way he is successful in his treatments and gets attainment, perpetual fame, and wealth. This is the statement that ends the entire section, so has a particular force. It seems especially true since not long beforehand we learned that one of the auspicious signs was getting wealth (*dhana*), power (*aiśvarya*), and happiness (*sukha*).[415] It is not entirely clear from the passage whether it means the physician gains these or the patient, but in either case it helps to ensure the doctor indeed will attain wealth, for patients with auspicious signs are the ones the doctor stays with and treats.

For all its force, though, in the *indriyasthāna* we are only told once that learning these signs of impending death—and hence who to treat and who not to—will lead to fame, etc. On the other hand, the ten times there is mention in chapter 6 not to treat a patient is just the tip of the iceberg. In total in this section the injunction not to treat a dying person is given 31 times. Why might this be necessary, especially if the reason—or a reason for it, namely fame, etc.—only needs be given once? What is the purpose of the repetition?

An examination of the broader context of these proscriptions may help, and will be done shortly, but there is one more element in regard to treatment which needs

[414] Ibid., 12.90.
[415] Ibid., 12.71.

attention prior to that. Again it is not something entirely new, but something which nevertheless deepens our understanding. This is in regard to how the doctor should behave in relation to the cases he rejects. We saw advice given to students in the *vimānasthāna* when they realized a patient's life was nearing its end to not let the individual or family know. Here this is repeated outside of the student-specific context, thus we know it is not special advice restricted to those in medical training. Here is the advice:

> *maraṇāya iha rūpāṇi paśatā 'pi bhiṣagvidā* /
> *apṛṣṭena na vaktavyaṃ maraṇam pratyupasthitam* //
> *pṛṣṭena api na vaktavyaṃ tatra yatra upaghātakam* /
> *āturasya bhaved duḥkham athavā 'nyasya kasya cit* //
> *abruvan maraṇaṃ tasya ne enam icchec cikitsitum* /
> *yasya paśyed vināśāya liṅgāni kuśalo bhiṣak* //[416]
>
> If not asked about it, approaching death should not be mentioned
> by a perceptive doctor even in the case of seeing signs indicative of death.
> Also, if asked, it should not be mentioned in such a case since it could be
> injurious to the ailing one or distressing to someone else.
> A competent doctor should recognize the signs indicating demise
> which have told of that one's death. He should not endeavor to treat him.

So here we discover that though a physician is meant to learn the signs of approaching death and know them well, it is not information he is meant to share, at least not liberally. I have translated the *tatra yatra* of the second verse as 'in such a case' and 'since'. One could argue, however, that it would be better to render the *yatra* as 'where', so 'in the case where.' The alternate translation would be: Even if asked, it should not be mentioned in such a case where it could be injurious to the ailing one or distressing to someone else. That small difference in translation leads to a different interpretation of the meaning of the whole sentence such that in the first a physician is never to let on that he

[416] Ibid., 12.62-64.

knows death is coming and in the second that in some cases he might. In either case it would probably be a rare occurrence where nobody would get upset at the full-on realization of imminent death. The fact that a doctor has been called in would suggest an attempt at a cure is desired.

One has to wonder, though, if the prohibition on speaking about death being near at hand also is related to the treatment proscription given along with it. For, especially in this setting of constant reiteration not to treat the dying, it becomes all the more apparent as to how difficult pulling off such a silent exit would be: Non-treatment remains the call to (non-)action, but now the non-action cannot look like non-action. Thus, it is possible that in not announcing the approach of death, the physician might be trying to be spared entreaties to stay and keep trying to attempt a cure even if prospects look dire.

The broader context of the injunction against treatment may help to reveal the aim of the silence. Beginning with the sixth chapter of the section where Agniveśa's question about treatment is first raised, we see a litany-like response. All but one of the recommendations not to treat are found in this second half of the section, and alongside those we find the vast majority of the verses state in some form of phrasing that a person with x, y, and z symptoms will die. In total we hear the person 'will die' about three times more often than those statements about refraining from treatment. Added to this mix is a sprinkling of verses about treatment being ineffective for such and such a case. A typical example is seen in: *balaṃ vijñānam ārogyaṃ grahaṇī māṃsa śonitam / etāni yasya kṣīyante kṣipraṃ kṣipraṃ sa hanyate*.[417] Or: Strength, comprehension, health, digestive organ, flesh and blood—of whom these quickly waste away, he is quickly

[417] Ibid., 6.23.

struck down. Or, in a similar vein: *hrasvaṃ ca yaḥ praśvasiti vyāviddhaṃ spandate ca yaḥ* / *mṛtam eva tam ātreyo vyācacakṣe punarvasuḥ*.[418] That is: Who breathes shallowly and who shakes tossing about, Atreya Punarvasu explained, that one is truly dead. Meaning, of course, that the death is so certain you can already consider him in that state. As for the appeal to efficacy, that is seen in this example: *yasya gaṇḍāv upacitau jvara-kāsau ca dārunau* / *śūlī pradveṣṭi ca apy annaṃ tasmin karma na sidhyati*.[419] As translated: Of whom both cheeks are swollen, and there is a severe cough and fever, colicky pain, and an aversion for food, no action in regard to him is successful. Thus, implied is why treat such a case? Answered by one final example: *dīrgham uccvasya yo hrasvaṃ naro niḥsvasya tāmyati* / *uparuddha-āyuṣaṃ jñātvā taṃ dhīraḥ parivarjayet*.[420] A man, who having taken a long in-breath and having a short out-breath, gasps for air—having understood [his] life is impeded, the resolute [physician] should forsake him. In other words, a doctor who is steadfast would make no motion toward saving that life. There is no reason to treat if the treatments would be ineffective.

Hence, the refrain of the *indriyasthāna* runs: He will die. Treatment cannot work. Do not treat him. It runs as a sort of counter argument to the one about not treating the dying because of its impact upon oneself monetarily and in regard to reputation, not that these two need to be mutually exclusive. Nevertheless, they represent a different focus. At any rate, the litany of this section is not unbroken; two exceptions to the general pattern are seen. The first is in chapter ten. There is no mention here at all of the fact that a doctor should not treat these fatally ill individuals. No mention of efficacy. This is likely because this chapter is on *sadyo-maraṇīya*. *Sadyas* means today or instantly and

[418] Ibid., 7.25.
[419] Ibid., 7.28.
[420] Ibid., 8.15. Note *niḥsvasya* and *tam* are from Acharya, replacing *niḥsvamya* and *ta.*

the *maraṇīya* is a future passive participle coming from the verbal root √*mṛ*, so with a meaning 'will be dead.' This group is not just on the verge of death, they have a foot in the door; they will momentarily be dead. Momentarily, or sometime during the day. What exactly the time frame for this instantaneous death is is hard to say, though one day appears to be the outer limit. Elsewhere in the *indriyasthāna* the shortest specified time period until demise is three days.[421] It makes sense that in this kind of situation where there would be barely time to go and get any medicine or perform a therapy, there is not much need to reinforce the idea that these persons should not receive treatment. But this also gives us additional information about the rationale for withholding treatment via narrowing the field of possibilities. It eliminates the possibility that the others who were being described elsewhere were not being treated because there was insufficient time—because they were passing right before the physician's eyes. The others listed outside of chapter ten are not of this immediately passing category, so are not being forsaken for lack of any time whatsoever.

The second anomaly in the *indriyasthāna* is soup. This advice is given midway through the ninth chapter which, as in all the chapters of this section, deals with signs and symptoms of approaching death. The case is explained thus:

> *yaṃ naraṃ sahasā rogo dur-balaṃ parimuñcati /*
> *saṃśaya-prāptam ātreyo jīvitaṃ tasya manyate //*
> *atha cej jñātayas tasya yāceran praṇipātataḥ /*
> *rasena adya iti brūyān na asmai dadyād viśodhanam /*
> *māsena cen ne dṛśyeta viśeṣas tasya śobhanaḥ /*
> *rasaiś ca anyair bahu vidhair dur-labhaṃ tasya jīvitam //*[422]
>
> [When] an illness suddenly sets a very weak man free,
> Ātreya regards his life as one having incurred danger.
> Then if the family begs him [the physician], falling at his feet,

[421] Ibid., 7.8.
[422] Ibid., 9.15-17.

> he should say, "Give him broth. Do not give him a cleansing." And if a distinct improvement is not seen in him in a month with many, various other kinds of broth, it will be difficult for him to hold on to life.

What is interesting about this example is that it is the only place in the section where any kind of care for a patient is mentioned. And it is not due to a particularly extra-long length of life remaining that this exception is made, for elsewhere in this very chapter a case is mentioned where the ailing one is said to have approximately six weeks left (*trīn pakṣān*), and in the eleventh chapter several individuals are said to have up to a year remaining.[423] Nothing is being done for these individuals with a more extended period of dying. Furthermore, the advice is not readily offered—it comes in response to the begging of the family. It appears that otherwise the physician would have left without saying anything; thus, this remains one of those patients the wise abandon. Ātreya clearly sees this as a false rallying. In the case of a rally, though, however misleading it might be in the long run, it does not seem like the time a family would be begging for help. The imminent departure of the physician may be what prompts the appeal. Or perhaps this appeal happens after a new downturn. For whatever reason the family decides to beg for help, however, the situation suggests a reason why doctors might normally remain silent in the case of a bad prognosis as suggested above. Families are known to implore, and resisting action in the face of that might be hard—harder than simply calling to mind one's self interest.

This situation may also reveal a perceived threshold in both intensity and responsibility in regards to medicine. What I mean is that the prescribing of food substances may be seen as less risky in general than any type of elimination therapy; therefore, it may also be associated with less liability for the physician. A patient who

[423] Ibid., 9.22. and 11.3, 4, 5, and 6.

dies eating something the family has made but which the doctor recommended may be seen as less the doctor's fault than were the individual to be undergoing a purge whether at the hands of the doctor or simply on his advice.

As elsewhere, the competency of physicians is a concern and gets raised in relation to comprehension of these signs of death. For one thing we are told: *mithyā-dṛṣṭam ariṣṭābham an ariṣṭam ajānatā / ariṣṭaṃ vā 'py asaṃbuddham etat prajñāparādhaham.*[424] By an ignorant one, what are not signs of death may be wrongly regarded as signs of death. Or even [actual] signs of death may be seen as unrelated [to death]. What is at stake here is who to treat and not to treat. This physician is liable to treat ones he should not and not treat ones he should. Ignorance is again mentioned in this regard here: *pūrva-rūpān yathā svapnān ya imān vetti dāruṇān / na sa mohād asādhyeṣu karmaṇy ārabhate bhiṣak*.[425] The physician who understands these frightful dreams as early prognostic signs [of death] would not, out of ignorance in respect to the incurability of these [individuals], begin treatment. Both of these examples point to the importance of physicians understanding these signs and suggest that this knowledge is not entirely straightforward. Furthermore, timing is a crucial factor, as we learn from this instruction: *imāni liṅgāni nareṣu buddhimān vibhāvayeta avahito mumūrṣuṣu / kṣaṇena bhūtvā hi upayānti kāni cin na ca aphalaṃ liṅgam iha asti kiñ cana*.[426] A wise one should be attentive to these signs regarding dying persons, for, having come into being in an instant, they immediately pass away; and none of these signs here whatsoever are without fruit. That is to say, these indications of death all and only lead in one direction, and that direction is the patient's demise: as a blossom leads to fruit, even more reliably so these

[424] Ibid., 2.6.
[425] Ibid., 5.47.
[426] Ibid., 8.27.

indications unfold into destruction.[427] The relative wisdom or ignorance of the physician plays a part in all of these examples, but in this last one what is emphasized is the transience of the signs. A doctor needs to observe and recognize the significance of them at a precise moment.

The implications of this, and really of the section as a whole, is that in spite of the fact that the doctor is instructed to abandon the dying, he is there long enough to see these signs. It is not merely that the all-knowing relayers of this medical knowledge have understood these indications and are passing them on, but those who would be competent doctors have to learn them. One could argue, though, that these indications at least are what are needed so that a physician knows who to forsake; he sees them and then goes. However, the chapter on *sadyas* signs described above points to doctors—at least some doctors, sometimes—still being in attendance at the very day or even very hour of death because these are signs the wise also have to know. For example, verse 18 of the second chapter of this section refers to changes seen at the hour of death, *carame kāle,* or more literally, at the last moments.[428] Moreover, the reference to prognostic signs which are fleeting and the call for a physician to be carefully attentive places him at the bedside for more than moment. There is duration to his attendance. Therefore, although the general precept instructs a doctor to abandon the dying, the actual practice appears to have been more complex.

The specific signs tend to be clusters of symptoms, though they can also be a single sight or incident, such as seeing a jar full of water upon entering the sick person's home.[429] Of all the possible types of signs, those linked with the senses are clearly the

[427] This very analogy is used early in the section at 2.3.
[428] CS, In. 2. 13. See Monier-Williams, 318.
[429] Ibid., 12.32.

most significant. For the chapter title refers to this type of sign and the first five chapters are dedicated one to each sense. Why? Definitions of life from the *sūtrasthāna* along with the following passage from this section can help to answer that question:

> *asti khalu sattvam aupapādukaṃ yaj jīvaṃ spṛk-śarīreṇa abhisaṃbadhnāti yasminn apagamana-puraskṛte śīla asya vyāvartate bhaktir viparyasyate sarva-indriyāṇy upatapyante balaṃ hīyate vyādhaya apy āyyante yasmād dhīnaḥ prāṇāñ jahāti yad indriyāṇām abhigrāhakaṃ ca māna iti abhidhīyate*[430]
>
> The mind is indeed self-produced and it, vivifying, binds what is to be connected with the body by means of touching it; wherein prior to separation/death, its behavior turns about—affections are overturned, all the sense faculties are afflicted, strength is lost, and even diseases are caused to go off—due to which, being forsaken by that grasper of the sense faculties called the mind, life departs.

Prior to death the conduct of the mind makes a U-turn. Presumably that means its function as given in this statement as that which binds body and soul suddenly inverts. Rather than holding the two together, now it would push them apart. And recall one of the synonyms for life mentioned previously was *anubandha*, or binding.[431] Life is attachment. Therefore, death is a coming apart. Also listed in the synonyms of life was the compound *sarīra-indriya-sattva-ātma-saṃyoga*.[432] *Saṃyoga* is often stronger in meaning than simply union: this conjunction could equally be described as an "alliance" or an "intimate union".[433] And the passage quoted above gives us the terms of this contract; that is, in the lineup of body, senses, mind, and soul, in the order they appear in the compound also, mind is the go-between. Mind is the glue holding life together. Therefore, as death approaches and disunion begins, the senses are intensely affected. They are ignited, tormented, burned (*upatapya*). This impact allows the sense faculties to act as a window through which the approach of death can be seen. The symptoms as

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[430] Ibid., 3.13.
[431] See footnote 340.
[432] Ibid.
[433] Monier-Williams, 1035.

expressed via the sense faculties are not simply predictive, they are perceptible manifestations of a life coming apart.

Finally, in finishing up thoughts on the *indriyasthāna*, I will mention lifespan. In a section all about death, and unavoidable death at that, it makes sense there would not be discussion of what extends the span. But lifespan does find mention in regard to its remaining extent, *āyuṣaḥ pramāṇa-avaśeṣam.*[434] The signs and symptoms examined here allow one who is able to read them an understanding of how much time remains for the sick one, be it a moment, three days, six weeks, or a year.

CIKITSĀSTHĀNA

Whereas the *indriyasthāna* focuses on identifying who not to treat, the *cikitsāsthāna* focuses on how to treat. It deepens the view given at the start of the treatise in the *sūtrasthāna.* That is, before going into specific treatments, the nature and cause of different disease categories are described. These include the likes of fever, diarrhea, vomiting, poisoning, insanity. Some of these we might think of as symptoms rather than diseases *per se*, so it is not surprising to find detailed descriptions of sub-categories under these broad problems. It is in respect to these narrower manifestations of illness where prognosis is generally dealt with and is often where any mention of complicating factors is found. The treatments as well, more often than not, are given in reference to these specific sub-categories of disease. These treatments include diet and ingested medicines as well as elimination-type therapies (including of both digestive tract and blood) and external applications such as poultices, oils, or smoke. Non-corporeal remedies such as recitations of mantras can be seen as well.

[434] CS. In. 1.3.

This section is by and far the longest. In fact, it is longer than the other seven sections combined. Including both verse and prose passages, the *cikitsāsthāna* includes over 5,000 while all the others combined do not quite reach even 4,500.[435] That this portion is the heart and soul of the treatise and not just of especial length is indicated by a verse near its end: *iti sarva-vikārāṇām uktam etac cikitsitam / sthānam etad dhi tantrasya rahasyaṃ param uttamam*.[436] For all those diseases spoken of, this therapeutic section is the highest of the high because it holds the secrets of the treatise. *Cikitsā,* of the section title, means the "practice or science of medicine", "healing" and "administering or applying of remedies", and this is where specific recipes abound.[437] The term comes to have its meaning of to treat medically through the desiderative form of the verb √*cit*. The root verb means to "perceive", "know", "attend to", "observe".[438] Thus in the desiderative, it means desiring to attend to or desiring to observe, both being fundamental tasks in this medicine; that is, a physician applying this practice needs to watch for signs and to attend to patients.

Given the linking of the whole of Āyurveda with the desire for long life as seen previously, it is not surprising that this voluminous section of treatments start with rejuvenation therapies, including a general recommendation to do these therapies to in order to gain a long life.[439] The definition of the science here brings together the following characteristics: *puṇya-tamam āyuḥ prakarṣa-karaṃ jarā-vyādhi-praśamanam ūrjas-karam amṛtaṃ śivaṃ śaraṇyam udāram*[440] In other words, it is: sacred, causes long

[435] Ibid., xxvii.
[436] Ibid., Ci. 30.288.
[437] Monier-Williams, 323.
[438] Ibid. See also Perrett, 2016, p 30-31 where desiring to act is discussed in relation to various Indian philosophical schools.
[439] Cf. footnote 338. CS. Ci.1, part 2.22.
[440] Ibid., 1, part 4.4.

life, pacifies disease and old age, gives strength, is imperishable (or causes immortality), is auspicious, affords refuge, and is exalted. Sacred is the only thing which precedes mention of lifespan, though the other items are not insignificant either. Already in the opening section of the treatise we have seen strength as one of the most common concomitants of longevity, only slightly outpaced by happiness.

In this section of the text, especially in the early portion on rejuvenation therapy, there is abundant mention of what may accompany longevity when taking these remedies. A typical example is:

> *asya prayogād varṣa-śataṃ vayo 'jataṃ tiṣṭhati śrutam avatiṣṭhate sarva-āmayāḥ praśāmyanti apratihatagatiḥ strīṣu apatyavān bhavati iti / bṛhac-charīraṃ girisārasāraṃ sthira-indriyaṃ ca ati-bala-indriyaṃ ca / adhṛṣyam anyair ati-kānta-rūpaṃ praśasti-pūjā sukha-citta-bhāk ca // balaṃ mahad varṇa-viśuddhir agryā svaro ghanougha-stanita-anukārī / bhavaty aptyaṃ vipulaṃ sthiraṃ ca samaśnato yogam imaṃ narasya //*[441]
>
> From the use of it, one has a hundred years of life without old age, he retains what he hears, has all ailments pacified, has unceasing success with women and has progeny. A man enjoys union with these: a powerful body, iron-like firmness, steady and powerful sense faculties, invincibility, a beloved figure, honor and esteem, peace of mind, great strength, a most pure complexion, a voice like the rumbling of gathering clouds, steady and abundant offspring.

This is typical because many of these characteristics are those which are most commonly seen, but also because several verses refer back to this one in regard to the benefits a particular rejuvenation therapy includes.[442] It functions like an all of the above. However, as compared to when first encountered in the *sūtrasthāna*, the order of importance of the concomitants has shifted. Here strength and being disease-free top the list. Lack of old age, fame or success, strong sense faculties, a good mind, and a good memory cluster

[441] CS. Ci.1, part 1.4-6.
[442] Ibid., part 1.10, 11, 13 and 15.

next. This is followed by a good complexion, voice, virility, and youth. Happiness, nourishment, and good digestion gain some mention.

What this means is that happiness drops from being the most important characteristic to nearly out of sight. Being disease-free rises substantially. Strength remains of primary importance. Fame and lack of old age are new. Perhaps the shift in emphasis is related to the emphasis of the section. Remedy after remedy will be given to fight diseases, so being disease-free is part of the topic at hand. Also, the rejuvenation therapies emphasize drawing out life, so aging comes more to mind. Most therapies continue to promise a good 100 years as seen in the example above. However, others go further. In regard to a certain fruit touched by drops of *amṛta* and then eaten, one is told: *...yāvanti bhakṣayet* / *jīved varṣa-sahasrāni tāvanty āgata-yauvanaḥ*.[443] In other words, as many of these that one should eat, he will live that many thousand years endowed with youth. This is quite a boost from the typical hundred-year lifespan, but for one willing to spend six months enclosed in a tub, unconscious, the gains can be even more. Namely: *daśa-varṣa-shasrāny āyur an-upadravaṃ ca iti*.[444] In that case, one is said to gain a life of ten thousand years without misfortune. Enclosure is also mentioned in conjunction with a rejuvenation recipe at chapter 1, part 1, verse 74 of this section; the vessel there is a *kutī* or hut. This last example is noteworthy because one who is already aged (*jarā-kṛta*) emerges with a body which has new youth (*nava-yauvana*). These therapies can prevent old age *and* undo it. It is as though one is reborn without having to depart from a body. The symbolism of life gained by entrance into a womb-like enclosure is evident, and unconsciousness may represent death more or less symbolically. The soul or self,

[443] Ibid., part 3.13.
[444] Ibid., part 4.7.

however, does not have to leave home while its carriage is refurbished. Death does not displace being.

With such powerful remedies, then, the question becomes why does anyone ever get sick and die? Two answers are found in this section. One is related to the very power of the medicines. Indra tells the sages: *divyānām oṣadhīnāṃ yaḥ prabhāvaḥ sa bhavad-vidhaiḥ / śakyaḥ soḍhum aśakyas tu syāt soḍhuṃ kṛta-ātmabhiḥ*.[445] One who is self-possessed, of your sort sirs, is able to bear the effect of these divine medicines; one [of another sort] would not be able to bear [them.] This is told in relation to the herbs and procedure which promises tens of thousands of years. Such a treatment and others like it are not an option for a common man because of their *prabhāva*, that is, the intensity of their effect. One needs to be powerful in order to withstand powerful medicines. But not all of the remedies described are of this divine type; therefore, this cannot be the whole answer. A second reason is seen in a passage related to sages:

> *tapasā brahmacaryeṇa dhyātena praśamena ca /*
> *rasāyana-vidhānena kāla-yuktena ca āyuṣā //*
> *sthitāmaharṣayaḥ pūrvaṃ na hi kañ cid rasāyanam /*
> *grāmyānām anya-kāryāṇāṃ sidhyaty aprayata-ātmanām //*[446]
>
> The great sages living in days of old were successful by means of performing rejuvenation therapies and by means of pacification, meditation, celibacy, and austerities at the proper time of life. Rejuvenation will certainly not be at all successful for rustics, those of improper actions, and those who are not self-restrained.

These both tie life to moral factors. That is not what is new here, for in the *sūtrasthāna* those who were self-governed were said to have more stable lifespans.[447] While in the *nidānasthāna,* on the other hand, patient actions were said to affect the severity of a

[445] Ibid., part 4.8.
[446] Ibid., part 3.7-8.
[447] See footnote 346.

disease, improper conduct shifting something which would normally be curable into the incurable realm.[448] Furthermore, in the *vimānasthāna*, past actions were said to be a cause of disease, making individuals vulnerable to epidemics and so forth. Here, though, is the first time moral factors are shown to impact the efficacy of medicines. In the first example it is somewhat indirect: those of weak moral fiber cannot endure the force of the more powerful medicines. In the second, the actual efficacy of the medicine is impacted by the individual's moral makeup, nullifying or at least dulling its ability to act. Thus, one's character can not only be a cause of disease, impact its severity, and have an effect upon lifespan, but also it impacts treatment options. If one's actions dull the efficacy of medicines, stronger therapies would be needed to affect a cure. But, as we have seen, those are only possible for a strong patient. With this, strength retaining priority as a characteristic associated with therapies that augment lifespan becomes clearer. It affords someone who may not be of the highest moral caliber a little therapeutic wiggle room.

Indeed, when specific therapies are given beyond these rejuvenation ones, doctors are repeatedly advised to pay attention to the relative strength of the individual and only after having considered strength or weakness (*prasamīksya balābala*) to treat; such a physician is called *yuktijña*, one who knows the proper application of remedies.[449] It is not just that the remedy might be scaled back if it is powerful and the patient is not, rather a different remedy may be substituted. For example, in relation to a problem of abdominal swelling, the weak (*durbala*), the old (*sthavira*), the very young (*śiśu*), and delicate youths (*sukumāra*) are called *avirecya*; that is, they are ones not-to-be-purged, instead they are to be given ghee, meat soup, massage, and enemas.[450] This hierarchy of

[448] See footnote 359.
[449] CS. Ci.16.117.
[450] Ibid., 13.66-67.

types of therapies is seen elsewhere as well. For example, in regard to patients with breathing difficulties and hiccups, we are told: *sarveṣāṃ bṛṃhane hy alpaḥ śakyaś ca prāyaśo bhavet / na arthaṃ śamane 'pāyo bhṛśo 'sakyaś ca karśane*.[451] Of them all, few ought to be caused to depart from life upon [the application of] nourishing therapy, and not very many depart upon [the application of] pacifying therapy, but to a great extent this is not so upon [the application of] elimination therapy. Here the elimination therapies are set apart from other types, whereas above a hierarchy could be seen within the category of elimination therapy, purging being more serious than enemas. Or, in the terms here, it is a stronger therapy.

These recommendations, then, illustrate more than the importance of strength for recovery from illness; they show inherent risk in medical treatment. A physician needs to be careful about what treatment is given to whom or damage may be caused. Even then, the impact of medicine does not always appear to be entirely predictable. An example of a possible deleterious outcome can be seen in the following: *rasāyana-vidhiṃ bhraśāj jāyeran vyādhayo yadi / yathā-svam auṣadhaṃ teṣāṃ kāryaṃ muktvā rasāyanam*.[452] If diseases are produced as an outgrowth of the application of the rejuvenation therapy, then, having set aside the rejuvenation therapy, medicine for each of them should be given respectively. Now, we have seen previously that inept physicians can cause damage and even death, but here the diseases are not being blamed on doctor error, at least not overtly. Rather these diseases are described as a possible outcome of the therapy itself: They are treatment caused diseases.

Factors other than strength are also said to impact patient outcomes. For example, in regard to types of wasting diseases, we are told: *alpa-liṅgasya dīpta-āgneḥ sādhyo*

[451] Ibid., 17.149.
[452] Ibid., 1, part 4.29.

balavato navaḥ / parisaṃvatsaro yāpyaḥ sarva-liṅgaṃ tu varjayet.[453] So: New [disease] in one who has few symptoms, good digestion, and who is strong is curable. After a year has passed, [the disease] is one which can only be supported, but one with all the symptoms should be avoided. In other words, this last is in no way curable at whatever point in time it should appear, thus the physician is not to treat it. In this example, time, strength, and number of symptoms are what matter most. Along similar lines, in relation to a kind of swelling, we see: *ahīna-māṃsasya ya eka-doṣa-jo navo balasthasya sukhaḥ sa sādhane*.[454] In the case where [the disease] is new and the product of only one disordered humor for one who is not emaciated and who is strong, that is alleviated upon use of medicine. Time, strength, and severity all play a role in curability in this case as well, but here rather than discussing symptoms *per se*, it is the disturbance of the number of underlying humors which marks severity.

Humor involvement is very commonly seen as a prognostic factor. If the refrain of the *indriyasthāna* is "He will die. Treatment cannot work. Do not treat him," then the litany heard in the *cikitsāsthāna* is as follows: *eka doṣa-anugaṃ sādhyaṃ dvi-doṣaṃ yāpyam ucyate // yat tri-doṣam asādhyaṃ tan manda-āgner ativegavat / vyādhibhiḥ kṣīṇa-dehasya vṛddhasya anaśnataś ca yat*.[455] This statement is made in regard to a hemorrhagic disease and means: [The disease type] which corresponds to one humor is curable, with two humors it is supportable, it is said, and with three it is not curable and when it is connected to one with weak digestion, when it is rapidly progressing, when found in one with a body emaciated by diseases, in the aged, and in those who are not eating [it is not curable]. Similarly, in regard to a rheumatoid-type disease: *eka-doṣa-*

[453] Ibid., 11.14.
[454] Ibid., 12. cd 16.
[455] Ibid., 4. cd 13-14.

anugaṃ sādhyaṃ navaṃ yāpyaṃ dvidoṣa-jam / tri-doṣa-jam asādhyaṃ syād yasya ca syur upadravāḥ.[456] [The disease type] which corresponds to one humor which is new is curable, with two humors it is supportable, with three it is not curable and [also] of those in whom there are supervenient diseases. This frequent pattern moves from the curable to the *yāpya* and on to the absolutely incurable. In such examples, then, the curables are being lumped together and the two types of incurables are explicitly divided. Given this is a section on treatment, this might suggest we will see different recommendations in relation to these two types of 'incurable' cases. And, indeed, *yāpya*'s very status as a category of the incurable is blurred by being placed in contrast to the general category heading for the incurables, *asādhya,* (as we see done in these two instances above) rather than in relation to the parallel sub-heading of *an-upakrama.*

One reason why diseases with the conjunction of all three humors, the *sannipāta* ones, are incurable is given in terms of treatment possibilities.[457] In regard to a dry spreading itch we are told: *sannipāta-jaṃ tu sarva-dhātv-anusāritvād āśu kāritvād viruddha-upakramatvāc ca asādhyaṃ vidyāt*.[458] But [the disease type] originating from the falling together [of all three humors] should be known as incurable due to the involvement of all tissue types, the rapid disease progression, and the treatments being mutually contradictory. In other words, what is needed to restore normalcy to one humor would interfere with the restoration of another. A similar case is seen in relation to types of insanity: *yaḥ sannipāta-prabhavo 'tighoraḥ sarvaiḥ samastaiḥ sa ca hetubhiḥ syāt / sarvāṇi rūpāṇi vibharti tādṛg viruddha-baiṣajya-vidhir vivarjyaḥ*.[459] That [disease type] which is produced by the falling together [of all three humors] is very dreadful and would

[456] Ibid., 29.30.
[457] Cf footnote 366.
[458] CS. Ci. 21.42.
[459] Ibid., 9.15.

be accompanied by the causes from each [individual humor] compounded, bearing all the symptoms; such a one should be avoided as it would require the implementation of mutually contradictory therapeutics. As is typical, the diseases which are incurable are those which are to be abandoned, but here we see one reason is because the therapies, being mutually contradictory, would be ineffective. This, however, is not the only treatment recommendation for disease involving a disturbance of all three humors. With some frequency the suggestion is given to use the treatments which would be applied for each humor alone altogether in combination, in those cases ignoring the idea of them being mutually contradictory.[460] Furthermore, it is not just a matter of general recommendations but specific remedy recipes are given—which reinforces the idea that this was actual practice and not just a theoretical construct.[461] Also, though in speaking about the *sannipāta* as a disease category or level of severity, it is incurable, in contrast, in specific instances it can be treated as if difficult to cure or simply curable.[462] This ambiguity or inconsistency is seen as early as the first section of the treatise, but here it is more clearly demonstrated as cures are applied.

Granted one may argue that this has more to do with the disease type than anything else. For example, a disease such as a headache may never be as dangerous as some others such as respiratory problems. Along with this one may argue that it is not just the coming together of the three humors that is determinative, but also the primary location where they have come together, some parts of the body being recognized as more vital for its functioning than others. Are there instances where a disease is both

[460] Ibid., 13.16; 26.183; 30.43; 30.86.
[461] Ibid., 3.110; 12.42; 16.110; 19.81; 26.35.
[462] Ibid., Curable: 12.42; 16.110; 19.81. Difficult to cure: 3.110; 26.35.

called incurable and treated, as evidenced by actual remedy recipes or by a recommendation to treat it?

We have already seen above that the *yāpya* diseases, though they may be categorically incurable, are functionally ambiguous or intermediate. So examples such as the following, while illustrating that those cases do receive treatment, cannot resolve the question above: *bheṣajaiḥ sādhya-yāpyāṃs tu kṣipraṃ bhiṣag upācaret / upekṣita daheyur hi śuṣkaṃ kakṣam iva analaḥ*.[463] That is: But the physician should quickly attend to those which are to be supported and those which are curable with remedies because if neglected they would consume [the patient] as fire consumes dry grass. Note that here curable and supportable are linked tightly enough to appear in the same compound. In this respect, for this disease, they are identical in respect to the advice given.

Here it is also useful to make a distinction between diseases which are long lasting and those which are *yāpya*. *Yāpya* is a way to look at the relative severity of a disease, and often ones which are of long duration may be classified as such. However, there is not a one-to-one relationship and often terms showing long duration, such as *cira, dīrgha-kāla, purāṇa,* and *jīrṇa,* are used with no discussion of the disease being *yāpya* (meaning respectively: long, long-time, old, lingering.)[464] Time is a factor that moves any disease toward the direction of greater severity from wherever it may have originally been.

Time is shown to be significant in this example as well: *sannipāta-jvarasya ante karṇa-mule su-dāruṇaḥ // śothaḥ saṃjāyate tena kaś cid eva pramucyate / rakta-avasecanaiḥ śīghraṃ sarpiṣ-pānaiś ca taṃ jayet*.[465] A swelling at the root of the ear at the

[463] Ibid., 17.69.
[464] See Ci. 10.65 (*cira)*. 14.17 and 21.127 (*dīrgha-kāla*). 7.55 (*purāṇa*). 3.220, 223, 239 and 291 (*jīrṇa*).
[465] Ibid., 3. cd 287-288.

end of a fever with the conjunction of the three humors is quite dreadful; very few indeed are set free from it, and one should quickly conquer it by means of bloodletting and drinking ghee. A doctor is advised to treat this illness quickly, but as we see it is an illness that is generally fatal, "very few indeed are set free from it." This is normally the kind of situation a physician is told to abandon from afar. For previously we have seen a doctor shying away from a case where he had seen signs of demise, attempting not to inform the family, and only giving some instructions for treatment when begged. That was also a case where the far greater chance was that a patient would die than live. Here the chance of surviving remains small, so perhaps the exception is made because rapid and effective treatment does give the patient some chance at living? A remedy exists which can work for some.

This gives some suggestion that diseases which might normally be seen as incurable could, at times, be treated. Another instance where this is also implied is in the case of urinary disorders. Those related to the wind humor are said to be of four types, all of which are incurable.[466] Later the following proscription is given: *sarveṣu meheṣu matau tu pūrvau kaṣāya-yogau vihitā astu sarve*.[467] In regard to all the urinary disorders, one must prescribe the application of both the decoctions previously mentioned. So, in saying these remedies are to be given to every type of urinary disorder, it is said that treatment should be given to diseases which are called incurable. Moreover, the verb to be, √*as,* is not in the optative as is so often found in describing various medical hypotheticals. It is in the imperative: This is a command. The discussion continues in the next verse: *siddhāni tailāni ghṛtāni ca eva deyāni meheṣu anila-ātmakeṣu* / *medaḥ*

[466] Ibid., 6.7.
[467] Ibid., 6. ab 33.

kaphaś ca eva kaṣāya-yogaiḥ snehaiś ca vāyuḥ śamam eti teṣām.[468] In regard to those urinary disorders characterized by wind, compounded oil and also ghee are to be given because fat, phlegm, likewise wind, are pacified by the application of the unctuous decoction. Here, then, a particular therapy is not only recommended for a disease type that is said to always be incurable, it also is said to successfully effect the cure. Granted an apparent attempt to backtrack and qualify this statement is given later in the chapter indicating that those previous remedies were prescribed for *vāta-ulbaṇa*, literally meaning for an excess of wind or for clotted wind, though presumably meant to indicate a different kind of disease from the general wind category which was called incurable. An attempt is being made to suggest that there is not, in fact, a recommendation given to treat incurable disease. Along with this qualification comes a reiteration that a doctor is not to treat cases which are incurable (*asādhya*).[469]

Yet further examples can be seen with other disease types without accompanying qualifications. Two consecutive remedies for skin diseases, for instance, proclaim respectively that they destroy all diseases (*sarva-vyādhi-nibarhaṇa*) and pacify all diseases (*sarva-vyādhi-praśamana*).[470] Even if this means only all skin diseases, this includes varieties of disease which are recognized as incurable.[471] Further, evidence that *sarva-vyādhi* is meant as all diseases rather than meant as completely destroys or pacifies *a* disease is given in the prior verse which indicates that that particular remedy cures seventeen of the total eighteen disease varieties—which includes all but the one type described as incurable. Verses 71 and 72, then, up the ante over verse 70. An even firmer statement about the potency of a cure is seen in relation to insanity and seizures: *na*

[468] Ibid., 6.34.
[469] Ibid., 6.52.
[470] Ibid., 7.71 and 72.
[471] Ibid., 7.37-38.

asādyaṃ nāma tasya asti yat syād varṣa-śata-sthitam / dṛṣṭaṃ spṛṣṭam atha āghrātaṃ tad dhi sarva-graha-apaham.[472] That [type] called incurable would not exist [if given] one hundred-year old [ghee] because certainly the sight, touch, and smell of it repels all seizures. *Graha* in this case can mean a literal seizure such as with epilepsy or seizure by a demon resulting in various manifestations, or both at once. But what is of interest for us in this case is that the term incurable is not merely implied in this sentence: It is explicitly stated with *asādhya*. This cure cures the incurable.

This may be a case of theory colliding with practice; one pushing back against the other—a desire to transcend limits, to give ever more potent cures. The incurable is the pinnacle in that sense. Or it might represent an acknowledgement of medical gray areas, a place where everything is not so black and white, a place where even with all the factors considered, disease type, patient strength and so forth, it is still difficult to pinpoint what will happen. Some support for the latter exists in the following examples. First, in the case of a type of fever, we are told: *daśāhaṃ dvādaśāhaṃ vā saptāhaṃ vā suduḥsahaḥ / sa śīghraṃ śīghra-kāritvāt praśamaṃ yāti hanti vā*.[473] At the tenth, twelfth, or seventh day, [the disease] is very difficult to bear; from its being rapidly moving, it rapidly is quelled or rapidly kills. Thus, here the disease has two possible paths. Nearly identical wording is seen in the case of an alcohol-induced ailment: *sa tu vāta-ulbaṇasya āśu praśamaṃ yāti hanti vā*.[474] So: But of the type with excessively irritated wind, it quickly is quelled or quickly kills. Again, there is the possibility of the disease going in either of two opposite directions. The outcome is uncertain. With such a bifurcation of

[472] Ibid., 9.62.
[473] Ibid., 3. cd 54, ab 55.
[474] Ibid., 24.93. Note that here we see *vāta-ulbaṇa* again which suggests the meaning in both cases is simply excessively irritated wind humor and not the name of a specific disease.

possibilities, curable or incurable are not determinations which can be made at the outset. Needless to say, this complicates binary based treatment recommendations.

Let us look at one more case where the outcome is uncertain, and which will turn our attention back to death and the handling of patients near to death. This discussion comes in connection with a disease involving abdominal swelling in which all three humors are irritated and attempts at cure have not worked. The advice given is:

> *jñātīn, sasuhṛdo dārān, brāhmaṇān, nṛpatīn, gurūn /*
> *anujñāpya bhiṣak karma vidadhyāt saṃśayaṃ bruvan //*
> *akriyāyāṃ dhruvo mṛtyuḥ kriyāyāṃ saṃśyo bhavet /*
> *evam ākhyāya tasya idam anujñātaḥ suhṛd-gaṇaiḥ //*
> *pāna-bhojana-saṃyuktaṃ viṣam asmai prayojayet /*
> *yasmin vā kupitaḥ sarpo visṛjed dhi phale viṣam //*
> *bhojayet tad udariṇaṃ pravicārya bhiṣag-varaḥ /*
> *tena asya doṣa-saṅghātaḥ sthiro līno vīmargagaḥ //*[475]
>
> A physician, having sought permission from relatives, friends, wives, brahmins, sovereigns, and teachers, should prepare the remedy informing [them] of the risk:
> Death is inevitable without action; with action, there is risk.
> Thus, having communicated this about it, permitted by the group of friends,
> he [the physician] should give the venom[-remedy] mixed with food and drink to him [the patient].
> Or the best of physicians, having thoroughly examined the one with the abdominal swelling, should cause him to eat fruit into which an angered snake would emit poison.

Here the outcome is only uncertain to an extent. Without treatment, the patient will die. With it, the outcome could go either way. This again is a striking example because those likely to die are generally considered ones not to be treated. But in this case the physician is willing to try a potentially deadly remedy because it offers a chance for life. This example is also remarkable for the conversation which is to take place with those intimate with the sick individual as well as with religious and civic authorities. The need to get broad approval before carrying out a high-risk therapy is stressed, and stands in stark

[475] Ibid., 13. cd 175-179.

contrast to trying to abandon a patient without letting the family know the case is hopeless. It is especially a contrast because the remedy recommended in the first case was a mild soup. Why would one leave without mentioning something as innocuous as that, even if the chances of success were extremely slim? It could be the case here that this ill person is an especially important personage. Though there is no reason to assume an exemplary case would bring in extenuating factors beyond the typical disease factors. Or in such case, one might expect a caveat about this being a treatment for the good or wealthy. Some remedies do indicate that they are not meant for those who are lean of pocket. But at the very least this complicates the previous, seemingly simple picture of not treating those who are likely to die. In practice, we see the dying may or may not be abandoned.

As indicated above, physician error remains a concern in this section of the treatise, though here the focus is often turned toward the procedure rather than the performer of the procedure. That is, cautions are given about how to correctly carry out a therapy and what is to be avoided in doing so. This could be an indication of which symptoms or underlying causes to work with first or parameters for a given therapy. For example, in the case of those with a skin disease who are undergoing elimination therapy, the physician is warned not to clear out too much of the disturbed humor: *dose hy atimātra-hṛte vāyur hanyād abalam āśu*.[476] In other words: For if a humor is taken away beyond proper measure, the aggravated wind humor would quickly kill the weakened one. Too much of a good thing is bad.

[476] Ibid., 7.41.

What is implied in all the warnings is the power a physician holds. Life and death lie in his hands. The wise physician has been praised before, but now he is raised to an especially high level. We are told in the first chapter of the *cikitsāsthāna*:

> *dāruṇaiḥ kṛṣyamāṇānāṃ gadair vaivasvata-kṣayam* /
> *chittvā vaivasvatān pāśān*ˎ[477] *jīvitaṃ yaḥ prayacchati* //
> *dharma-artha-dātā sadṛśas tasya na iha upalabhyate* /
> *na hi jīvita-dānād dhi dānam anyad viśiṣyate* //[478]
>
> In regard to those with grave illnesses being dragged toward the abode of Yama,
> one who, having cut the noose cords of Yama, bestows life [upon them.]
> Another such giver of wealth and dharma as him is not to be found here
> because there is indeed no other gift better than the gift of life.

Yama appears here in his role as the Lord of Death or as a personification of Death itself. Those with dire illnesses are released from his rein and able to return to life. This is not the first time Yama's noose or fetters are mentioned. In the *sūtrasthāna,* ignorant physicians were said to be akin to the noose of Death.[479] They were like traps lain to steal life away from the unwary. This is the inverse situation, but an inverse with added agency. In the first case, doctors are but the cords one gets tangled in: an instrument serving another. Here, on the other hand, physicians are in contest with Yama to affect the release. This makes them on par with Death rather than someone's henchman. Furthermore, *dātā* (giver) is declined from the agentive noun *dātṛ*. Life is not something that passes through the practitioner's hand coming from the gods above or the force of past karma; it is a gift he gives and gains credit for. How does this physician map onto

[477] Note: the text uses a *virama* here rather than *ñ*.
[478] CS. Ci. 1, part 4.60-61.
[479] See footnote 327.

the one who is meant to abandon a dying patient from afar, staying well out of Death's way—the one who sees the noose coming and goes?

It may be worth recalling that the first chapter of the *cikitsāsthāna* is one which deals with rejuvenation therapies, so restoration is the context of the statement. Nevertheless, we see examples elsewhere of the physician snatching patients from death. In a chapter on poisons, a particular remedy is given which is said to cure various diseases if taken on a regular basis, from eye diseases to fever, skin diseases to diarrhea.[480] There we read of the power of this remedy: *kāla-parīto 'pi naro jīvati nityaṃ nirātaṅkaḥ.*[481] Even a man seized by death returns to life always ailment-free. It is *jīvati* which I have translated as 'returns to life', and one may argue that it would be better to simply render it as 'lives'—that is, one on the verge of death is caught before dropping off, the pitcher falling into the well arrested before it hits bottom. Such an argument is supported by the fact that not everyone who looks dead is dead. In a description of levels of intoxication, for instance, we are told: *tṛtiyaṃ tu madaṃ prāpya bhagna-dārv-iva niṣkriyaḥ / mada-moha-āvṛtamanā jīvann api mṛtaiḥ samaḥ.*[482] But having reached the third [stage] of intoxication, one is inactive like a log; even though living, cloaked with unconsciousness from intoxication, he is like to one cloaked by death. He may be dead-drunk, but he is not dead. That said, a counter argument is found in a category of antidotes for poison identified as *mṛta-sañjīvana*, i.e., remedies for 'bringing the dead to

[480] CS., Ci. 23.83-85.
[481] Ibid., cd 85.
[482] Ibid., 24.48.

life.'[483] The name suggests these remedies are for the truly departed; the pot is one which has not only begun its descent, but which has hit bottom. Even beyond that portion of the text (closed out by *iti mṛta-saṃjīvano 'gadaḥ*, meaning effectively the end of the medicines for bringing the dead to life) such suggestions are seen.[484] For example, still in regard to poisons, we read of one remedy: *hanyāt saṃjīvayec ca api viṣa-udbandha-mṛtān narān / nāmna idam amṛtaṃ sarva-viṣāṇāṃ syād ghṛta-uttamam*.[485] It would kill and also cause to be restored to life people deceased by means hanging or poisoning; this best of the ghee [remedies] for all types of poison should be called *amṛta.* This remedy, therefore, is being equated with the nectar which provides the gods their immortality. This term merits further consideration which will be given further on. However, for the time being notice the optative verbs from √*han* and *sam*√*jīv* which mean respectively to kill and to reanimate. It is a single substance which does both, pointing to the double-edged sword of power; for its power is what makes it simultaneously very dangerous and very effective depending upon its use. It also ties rejuvenation therapies to poison, helping to explicate the use of the snake-venom remedy as seen earlier. The physician wields this power. Having control over life means he has control over death whether through counteracting poisons, old age, or illness.

The classic Buddhist triad *mṛtyu-vyādhi-jarā* appears in the first chapter of the section.[486] Read in the direction of an analyzed compound, it runs thus: 'old age, illness,

[483] Ibid, 23.37. See Monier-Williams, 789.
[484] Ibid., 23.61.
[485] Ibid., 23.249.
[486] Ibid., 1.50

death.' Coincidentally or not, this is the order in which the Buddha-to-be encounters each of these phenomena. Here, though, the text is arguing that mortals who are susceptible to that triad should honor physicians, using the word *pūjya* for the medical men. Thus, it is more than simple respect; Monier-Williams defines this term as "deserving adoration."[487] Physicians are raised to the level of the sage and the divine. This very triad of old age, illness, and death are what caused Siddhārtha to set out looking for release. And because those ones subject to these problems are called to venerate physicians, the implication is precisely that physicians bear the solution to each and every one of these issues.

However, the whole of the section does not dally in such exultations. There is much nitty-gritty as we have seen above. Death appears in this latter context frequently. Physicians might be told in general to keep some distance from death, but signs of death were signs of duration of attendance. Furthermore, physicians' familiarity with the deceased also comes through the frequent mention of odor as a symptom: *kuṇapa-gandhin*, having the smell of a corpse.[488] Privately or professionally, it was an odor they were quite familiar with such that it became a frequent descriptor of symptoms in ailments ranging from a bloody nose to gynecological problems to abdominal swellings.

KALPASTHĀNA

The *kalpasthāna* focuses more specifically on the process of treatment from preparation to administration. Because of this death, dying, lifespan, and even curability are not big topics. The basic assumption, carried from the treatise as a whole, is that if

[487] Monier-Williams, 590.
[488] CS Ci. 21.38. See also: 4.98; 13. 44; 19.9; 23.101; and 30.12.

something is being treated, the ailment is curable. The concern is more with competence in carrying out procedures; nevertheless, there are a few points worth examining. One is what treatments are recommended for whom.

Previously it was mentioned that some remedies are out of the reach of the poor, and in this section especially a number of them are literally royal treatments. Several purgative recipes are said to be for the *īśvara*, i.e., princes, kings, lords. These are generally listed next to a purgative for the same illness, but without a particular type of patient specified.[489] There is the specified royal, and the unspecified other. In another case, scented garlands are recommended in order to purge those who are *nara-adhipa*, i.e., monarchs.[490] In this latter case at least, we can gather this remedy is suggested for the royals not because flowers are of great expense and rarity, rather what seems to be implied is that this is a treatment which is not noxious. One who is used to a pampered life could easily put up with it. And, indeed, many remedies are given which are suggested for those who are delicate. One example states: *bāle vṛddhe kṣate kṣīṇe sukumāre ca mānave* / *yajyo mṛdv-anapāyitvād viśeṣāc catur-aṅgulaḥ*.[491] That is: The [remedy called] four-fingers is of value in respect to the young, old, wounded, emaciated, and tender youth and tender men due to its particular characteristics of producing no ill effect and its gentleness. *Sukumāra,* one who is tender, appears frequently here and is often accompanied by the very young and aged as seen in this case.[492] The safety factor is emphasized again in this recommendation: *śreyo mṛdv asakṛt-pītam alpabādhaṃ niratyayam* / *na ca atitīkṣṇāṃ yat kṣipraṃ janayet prāṇa-saṃśayam.*[493] The preferable

[489] Ibid., Ka.7.25, 27, and 32.
[490] Ibid., 10.17.
[491] Ibid., 8.5.
[492] See CS. Ka.5.6; 7.8; and 8.18.
[493] CS. Ka.12.68.

[medicine] is a gentle one imbibed repeatedly which causes little annoyance and is risk-free rather than a highly noxious one which would quickly pose a risk to life. Why this matters to this study is that it points out once again that treatment can be deadly. Death and dying are mentioned, of course, in the context of certain diseases, but also with quite some frequency, death and dying appear in relation to the application of medicine.

On the other hand, we also read: *durbalo 'pi mahādoṣo virecyo bahuśo 'lpaśaḥ / mṛdubhir bheṣajair doṣā hanyur hy enam anirhṛtāḥ*.[494] Even one who is weak who has greatly irritated humors is to be purged bit by bit with gentle medications because those humors would kill him if not removed. This means that the physician walks a tightrope with death on either side: Medicines can kill and lack of medicine can kill. What is a doctor to do? One suggestion is given here in regard to a remedy meant to induce vomiting: *nirhṛte vā 'pi jīrṇe vā doṣa-nirharaṇe budhaḥ / bheṣaje 'nyat prayuñjīta prārthayan siddhim uttamām*.[495] If a [remedy] is either expelled or digested without drawing out the irritated humor, a wise one, desiring highest success, should employ a different [remedy] for curing [him]. Success means trying various options.

SIDDHISTHĀNA

The final section of the treatise continues the focus on successful administration of treatments, and in particular attends to procedures for managing multiple therapies in the form of *pañca-karma*. Sequence of treatments, dosage, and proper versus improper techniques are discussed. At the same time, there is a consciousness of this being the end of the treatise, and to an extent it returns to previous themes, even if just to briefly touch upon them. For example, the prohibition on treating the dying is given again in much the

[494] Ibid., 12.69.
[495] Ibid., 12.61.

same form as seen in the *vimānasthāna* at chapter VIII, verse 13 and chapter III, verse 45. This means that along with the dying (*mumūrṣu*), one is warned against treating those who lack means (*vihīnaḥ karaṇais*) and have various problems of character.[496] There is also a marked focus on remedies for special patient groups such as the very young, the old, and the tender, as well as consideration of treatment risks in relation to them.[497] For example an emetic remedy is not recommended for the following group: *kṣīṇa-atisthūla-kṛśa-bāla-vṛdha-durbalānām auṣadha-bala-asahatvāt prāna-uparodhaḥ*.[498] In regard to ones who are weak, old, young, too lean, too fat, or emaciated, due to not being able to bear the power of the drug, it obstructs life. The term for life here is *prāṇa*, so most literally breath is being blocked, and thus life ended. Throughout the treatise, this is the most common way to refer to a life being ended whether by means of disease, or poison, or treatment. The verb differs from time to time so that breath may be obstructed as above, or taken away as indicated by √*hṛ* and similar verbs; nevertheless, *prāṇa* remains the most common way to articulate what brings life to an end.[499] Breath is the keystone.

A cure-all enema, akin to previously seen cure-alls, is mentioned which eliminates every disease (*sarva-roga-hara*) and which is targeted especially at the women of the king's chambers (*antaḥ-pura-cārinī*).[500] But this positive outlook does little to outweigh the frequent reiteration of the dangers of treatment given in the *siddhisthāna*. Example after example explains errors which may lead to death. One of the more

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[496] Ibid., Si.2.5.
[497] See for example Si. 1.27; 2.12; 3.31; 10.7; 11.36; 12.16.
[498] CS. Si.2.9.
[499] See for example Si.2.12 and 11.9.
[500] CS. Si.12.3.

dramatic of these comes in a situation where enema fluid is coming out of the patient's mouth. In such as case, the physician is instructed to fix the problem thus: *vastra-pāṇi-grahaiḥ kaṇṭhaṃ rundhyān na mriyate yathā*.[501] So, by seizing the throat with the hands or a cloth one should obstruct [it] in such a manner as to not lead to [the patient] being dead. This seems like a tricky maneuver at best, but other less dramatic interventions can also be dangerous if given when contraindicated. For example: *baddha-cchidra-udaka-udara-ādhmāna-ārtānāṃ bhṛśatara-madhya-apya bastiḥ prāṇān hiṃsyāt*.[502] For those suffering from abdominal bloating, fluid accumulation, piercing, or obstruction, an enema, having reached the belly, intensifying [the problem], would destroy life. Notice that what I translate as life here is once again coming from an accusative plural of *prāṇa*. In the first case where the airway is blocked by the physician's (or perhaps assistant's) hands, death as coming from a lack of breath is a straightforward description of cause, but here we are not given it as a direct cause but as an equivalent of life. In another example, a treatment recommendation for a certain group of patients is given as follows: *tṛṣṇā-mūrcchā-mada-ārtasya kuryād āmaraṇāt kriyam*.[503] Of those suffering from madness, fainting, and [severe] thirst, one should give them medical treatment up until death. In other words, the physician should keep trying to help these individuals as long as any life remains in the body. This unusual recommendation has a broader context which is important, and has to do with why I have translated *mada* here as madness rather than intoxication. These are patients who are in the midst of treatment. But before

[501] Ibid., 7.35.
[502] Ibid., 2.15.
[503] Ibid., 6.81.

examining that context, a word on the translation of this sentence is necessary. The ablative of *āmaraṇa* is marking from the current moment of the problem onwards while the prefix *ā* is showing what Monier-Williams terms a "conclusive limit" versus an "inceptive" one; thus, meaning until the moment of death rather than starting from the point of death onwards.[504] The latter obviously could not work logically as then what would result is two different starting points, the present point and the point at which death is reached. Returning to the hypothetical medical situation at hand, in regard to patients undergoing a purification therapy we are told: *atitīkṣṇaṃ mṛdau koṣṭhe laghu-doṣasya bheṣajam* / *doṣān hṛtvā vinirmathya jīvaṃ harati śonitam*.[505] For those with slightly irritated humors in which the bowels are lax, a very harsh medicine having removed the irritated humors and having churned out blood, takes away life. It is these bleeding patients, injured by the treatment, whom the physician is told to keep treating right up to the moment of death.

Obviously much can go wrong in the normal course of treatment, and to be an accomplished physician one has to be familiar with all these possibilities and contraindications. Various treatment and patient factors intersect to make the application of treatment complex. So physicians are given this advice: *na ca eka-antena nirdiṣṭe 'py arthe 'bhiniviśed budhaḥ* / *svayam apy atra vaidyena tarkyaṃ buddhimatā bhavet*.[506] And a wise one should not just take on matters as directed here; a perceptive physician should also reason things out on his own. This statement supports the complexity of treatment

[504] Monier-Williams, 110.
[505] CS. Si.6.78.
[506] Ibid., 2.25.

seen above. In a situation where individual judgment is called upon, rules become guidelines, and thus an attempt at a fair representation of guidelines may superficially appear inconsistent. The general and repeated statement that one should not treat the incurable gets contextualized by nuanced medical hypotheticals. Bifurcations of possibilities happen, as indicated earlier, where the situation is not able to be reduced to curable or incurable. In those cases, individuals are recognized as sometimes dying and sometimes living. This type of difficult to classify disease situation comes up in this section as well: *sa śiro viṣavad-vegī nirudhya āśu galaṃ tathā* / *tri-rātrāj jīvitaṃ hanti śaṅkhako nama nāmataḥ* // *paraṃ try-ahāj jīvati cet pratyākhyāya ācaret kriyām*.[507] Here, as opposed to most of the deadly situations in the *siddhisthāna*, this is not a treatment related problem—which may impact treatment decisions. As translated: The disease called by the name of *śaṅkhaka,* having obstructed the head and throat with a speed like that of poison, kills a living being within three nights. If he lives beyond three days, having [previously] refused, [now] one should provide medical care. Sharma and Das take the *pratyākhyāya* to mean the doctor should communicate the danger of treatment to those around the patient as *√ākhyā* would mean. However, the greatest danger appears to have already passed. Furthermore, if the physician had been treating the patient throughout, there would be no need to add here that one should treat this individual after the crisis. Thus, the implication is that during the period of great danger, the physician had held off from intervening.

[507] Ibid., 9.72-ab 73.

This brings us to the end of a treatise which defines its role not only as curing the ill but also as protecting or extending the span of life. Curing is just a part of the equation. Therefore, it is not surprising to find this statement about the *pañca-karma* procedure: *ity ātura-svastha-sukhaḥ prayogo bala-āyor vṛddhi-kṛd āmaya-ghnaḥ*.[508] Connected with [*pañca-karma*] there is happiness for the sound and for the sick: it augments lifespan and strength; it annihilates illness. In this manner, the treatise extends medical treatment to the healthy. Everyone who is alive is a potential, though not necessarily accepted, patient. It is also a medicine for physicians in so far as we are told: *dīrgham āyur yaśaḥ svāsthyaṃ tri-vargaṃ ca api puṣkalam // siddhiṃ ca anuttamāṃ loke prāpnoti vidhinā paṭhan*.[509] One obtains long life, fame, health, and also the three objectives of life abundantly as well as unsurpassed success in [this] world by reciting [this] treatise. That would make reading the best medicine.

In this last major section of the work, as has already been stated, there is a sense of needing to touch upon major themes before closing. I will do this as well, especially given that each of the eight sections has had its own topical focus, and so shed different light on the research questions. It should be clear at this point that the main stance of the treatise towards the dying is that they should not be treated. However, we have also seen a significant amount of evidence pointing to the fact that in practice the approach was not entirely uniform. This was seen in specific examples where dying patients were being treated and indirectly through an understanding that in order for physicians to learn the

[508] Ibid., 1.53.
[509] Ibid., 12.35-ab 36.

signs of impending death that they must have been in attendance during the dying process.

We have also seen that the categorization of disease severity involves multiple factors, and it is not always conceptualized in the same manner. At times we saw diseases divided into three degrees of treatability/severity, and at times we saw four. Severity is also associated with the type and number of humors involved in the illness with the greater number involved signaling a worse prognosis. When all three humors are disturbed, it is sometimes spoken of a necessarily fatal, and sometimes not. However, factors beyond disease type and humoral involvement also affect the likelihood of a patient being able to recover or not, and so have implications for whether that patient is to receive treatment. Factors such as age and strength were particularly important in this respect. These factors in turn affected what treatments could be used. For example, powerful medicines were seen to be inappropriate for the aged and weak because they could not be withstood by such individuals. So more broadly, then, we saw the availability and appropriateness of medicine impacting the decision to treat or not to treat. Furthermore, the time since the start of an illness would impact its treatability, and therefore would impact the decision of whether to treat the individual.

We also saw that factors outside the severity or type of illness affected the decision of who to treat or not. Moral and financial factors are the primary determinants in this respect, both potentially influencing which dying patients would be cared for. Physician error was also a factor, given that if a state of potential death were induced by

the one caring for the patient, this particular kind of dying patient would not be abandoned, rather efforts to rescue the afflicted would continue up to the final moment.

In discussions on life and death, it became apparent that, though there was an ideal, general lifespan conceived of (100 years), that the individual lifespan was not seen as predetermined or fixed. Both the medical and the moral could influence this, especially the rejuvenation therapies which were said to augment lifespan. The moment of death was most commonly associated with the end of breath, but two general types of death were recognized: the timely and the untimely. This was described by me in terms of double and single train tracks. Some events have the possibility to occur at unexpected times, and in so far as that is possible, they are independent of time. Time and the event are running along parallel tracks and generally expected to keep pace, but, in fact, are not always in sync. But old age, on the other hand, in being described as an illness and an inevitable state, seems to be a time when the two tracks have merged, and the track eventually comes to an end. (Though this is the general stance, it also is not entirely uniform. For if rejuvenation therapies can undo old age, as some statements indicate, then death would not be inevitable, at least not at the commonly held limit of 100 years.) And though death is most often associated with loss of breath, there is also the sense given of death as a breaking apart of a union of elements that have allowed for life. There is a concept of the body, for example, as a vessel for life. This fits in with the idea of a movement from a more perfect to a less perfect time and of change, therefore, as implying a change for the worse: Existence is on a downward slope. These considerations

have prepared us for discussion of the *Kālajñāna,* a text which by means of its title promises to give us some understanding of Death in its conceptualization as Time.

Chapter 4: *Kālajñāna*

baḥr-i hastī sā koī dariyā-i be-pāyāṉ nahīṉ
āsmān-i nīl-gūṉ sā sabza-i sahil kahāṉ[510]

A river without end is still not at all like the sea of life.
How could a greensward of shore compare to indigo skies?

With the *Kālajñāna* and this chapter, we move away from the broad view of a multivolume, all-encompassing medical treatise to the fine focus of a few dozen folios. That these folios bear in mind the broader tradition is seen when the text interrupts its main flow and shifts off topic to insert a reference to issues of importance seen previously in the CS. For example, lodged between two remedies for fevers, at line 106 a statement is made on the importance of being able to properly judge a medical text. Or we see in lines 14-16, amidst a description of general physiology, physician competence mentioned. But the main concern of this text, and what takes up the bulk of it, is remedies for diseases, primarily fevers and primarily arranged according to the number and type of humors involved.[511] How this focus relates to what the work states it is about and to our interest in death needs to be untangled.

The obvious place to begin here is with how the text presents itself. The title of the work is a compound of the straightforward *jñāna,* knowing or knowledge, joined with *kāla,* a word that means Time or Death. At times in this treatise, one of these is clearly meant over the other. However, there are also a number of times when the two are not so easily divided, and this represents the main shift we see from the CS. In the CS, there was clearly a relationship between time and death, but the two were not always present together. There was, for instance, the concept of the untimely versus timely death—a distinction not mentioned in this treatise. Plus, the term most commonly associated with

[510] A verse by Hyder Ali Ātish. Translation is my own.
[511] Because of the length of this treatise, the transcription will appear in the first appendix.

the end of life there was *mṛtyu* or various phrases associated with the cessation of breath. *Kāla* was rarely seen in its meaning of death. In the KJ, on the other hand, we get the sense that in one way or another Time is Death. While exploring the main research questions, we will also see the manner in which time comes into play and what that changes in relation to previous views. Thus, we will look at what categories or signs indicate the approach of death, what the physician decides to do or not do based on that knowledge, and what is revealed about the understanding of the nature of death. As previously, ideas about the nature of health, life, and lifespan will be tied to the understanding of death. And though we will see a shift in the understanding of the nature of death, we will, nevertheless, see that previous ambiguities about treatment for those with fatal illnesses persist and are visible even within this brief treatise.

SIGNS AND INDICATIONS

The KJ gives its statement of purpose immediately following its invocation, as is seen in the following verse: *kāla-jñānaṃ kalā-yuktaṃ* / *śaṃbhunā yac ca bhāṣitaṃ* / *yena ṣaṇ-māsataḥ pūrvaṃ* [/] *jñāyate mṛtyu-rogiṇā*.[512] Or: As related by Śiva, knowledge of time is linked to [knowledge of] moments, by which a fatal illness is known six months beforehand. This is not to say that the treatise does not sometimes give signs of illnesses and call them fatal without attaching a set duration to the remaining lifespan.[513] That does happen, but what is key here is that time somehow becomes a diagnostic tool; an understanding of it allows the physician to see death coming. I will try to tease out here just what such an understanding might look like. And it should be noted that though the example given in the opening statement about foreknowing death speaks of six months,

[512] Because the numbering in this treatise is erratic, line numbers will be used to identify verse and prose locations. These begin at the first line of the manuscript and continue continuously through to the end. This verse spans the first and second lines of the work.
[513] See, for example, lines 53-54, 65, 67-68.

that is merely an example. A broad range is seen. Sometimes that period is a mere week, sometimes it is a year. (*Sa yāti sapta-rātreṇa niścitaṃ yama-maṃdiraṃ*[514]: He will surely go to the house of Yama within seven nights. And *āhāraṃ hṛdaye yasya sa varṣeṇa vinaśyati*[515]*:* He who has chyle in the heart is destroyed within a year.) Notice as well that I have translated *kalā* as moments. That word does, indeed, mean a small interval of time, such as a minute or two. But it also means a sixteenth part, which is a division of the waxing and waning moon. Whichever of these is meant, we see that health is being tied to intervals and that the physician needs to understand and be able to work with these intervals. Because the moon continually waxes and wanes, we might expect to see those intervals not simply as equal divisions of time (one merely further along than another), but as distinct based on their place in the greater cycle. If this is the case, we do end up with a calculus of medicine, one which must continually keep up with ever changing states.

In fact, there is some evidence for reading *kalā* as related to lunar increments of time. For though seasonal illness was seen in the CS, the divisions were general. Here they are more specific: diseases are not merely associated with seasons, but different months are responsible for different illnesses. For example, at line 114 we see: *śrāvaṇe vātilāḥ rogāḥ nabhasi saṃnipāta-jāḥ*. That is: In the month of Śrāvaṇa, in the rainy season, diseases of wind are produced by humoral conjunction. Or, in the next line: *mārgeṣu śleṣmalā rogāḥ pauṣa-māse tathā eva ca*. Meaning: And in like manner, in the month of Pauṣa, there are diseases of phlegm in the body's channels. The terms for these two months do not even appear in the CS, and each only appears one time in the whole of

514 Lines 71-2.
515 Line 78.

the *Suśrutasaṃhitā*.[516] This new division of illnesses by months does suggest that what a physician needs to understand is, at least in part, tied to the shifting of the moon.

So, the degree of specificity of characterizing diseases, some of which may be deadly, in relation to time has increased. However, the importance of timing in relation to impending death as signified by the signs known as *ariṣṭa*s was seen previously. Physicians were urged to pay close attention, and their ongoing presence was needed in order to catch these significant but fleeting indications of death. The transient nature of clinical indications appears in the KJ as well. At lines 90-91 we read: *jvarasya prathamo tthāne lāṃcan aṃta-dina-trayaṃ.* That is: The initial marking in respect to the locality of a fever ends after three days. Furthermore, different fevers are associated with different cycles. We see remedies being given for tertian agues (*tṛtīyakam*) and quartan agues (*cāturthakam*).[517] This makes time an important factor in both diagnosis and prognosis.

ACTIONS

The question to ask ourselves next is what kind of impact, if any, time has on treatment. Does a physician as a result of this understanding of illness change his actions somehow? It is curious that time periods are attached not only to amount of life remaining in a given illness but to duration needed for treatment as well. Certain fevers can be cured in a matter of days, while others take years. For example, in lines 58-59, we are told: *saṃdhige sapta-māsa-āji … ug-dāhe viṃśatir.* Combating Sandhiga disease takes seven months…in the Forcefully-burning one, [it takes] twenty. Furthermore, in the following line we are given that *hāridre vāsarāḥ saptaḥ kaṃṭha-kubje trayo-daśaḥ.* In other words: In Hāridra Fever [it takes] seven years, in Bent-neck Fever thirteen. The fact that these cures take set amounts of time would seem to eliminate the role of the

[516] As per the *Digital Corpus of Sanskrit*: kjc-sv013.kjc.uni-hedelberg.de/dcs/index.php?contents=abfrage.
[517] See lines 210 and 212, and lines 215 and 216 respectively.

accompanying factors that were seen in the CS. At first glance, for example, age, strength, or one's moral composition no longer seem to matter as they do not impact the amount of time to cure. Disease type alone is mentioned as a factor in association with duration. However, the fact that remedies are given at all would indicate that that element is nevertheless a necessary component for healing; one is not to assume that after seven months or thirteen months that the disease would go away by itself. We then may ask what impact, if any, this kind of predictive category has on the previously seen categories of incurable and curable.

The terms used for the most general dichotomy in the CS, *sādhya* and *asādhya,* do make an appearance here. At lines 47-48, we read: *ādau ca yāyate rogaḥ sādhya-asādhyas tathā eva ca* // *saṣ-kalo niṣkalo vā api jīvitaṃ maraṇam dhruvaṃ*.[518] That is: And from the start, a disease obtained is thus only curable or incurable; whether sound or infirm, living and dying are fixed. This statement seems to confirm a disregard for accompanying factors as playing a role in whether a patient recovers, though here it could also imply that these are factored in from the start. Now, then, one might expect the problem of whom to treat or not to treat to disappear as well, for this suggests that there is no doubt now about what diseases would be curable and incurable. A definitive line should be able to be drawn, that is, if the practice of abandoning dying patients continues. Furthermore, the diagnostic category of *yāpya* appears to be lost, or at least not seen as applicable to fevers, given that no distinction is made between illnesses which take days to treat versus many years. If one can bring the illness to a close after a period treating it for thirteen years, it is still simply curable *(sādhya*).

[518] Note: manuscripts 454 and 619 have *sa-kalo*. Perhaps the ṣ was an unintentional parallel with *niṣ-kalo.* See the final section of this chapter for a discussion on the manuscripts.

We do find evidence that the recommendation for hopeless patients is still that they should not be treated. For instance, at lines 83-84, we see in the case of a patient with various symptoms including lethargy (*ālasyama*) that: *eva jvariṇam taṃ parivarjayet*—indeed, he [the physician] would be caused to abandon that feverish one. Additionally, at lines 82-83, we read: *aśaktaḥ pāṃḍu-varṇaś ca va ū nisvāśa-saṃjutaḥ / valaṃ ca patate nityaṃ taṃ parivarjayet*.[519] That is: In the case of one who is either truly weak or pale, who is attended by difficulty in breathing / and whose strength continually falls away, one would be caused to abandon him. The verb used, pari√vṛj, is the very same verb we see in the CS in the *indriyasthāna* where imminent death is discussed. There it likewise appears in the form of an optative from a causative. Thus, this effectively echoes that frequent injunction. But in each of the cases here, it is notably not the disease type *per se* which is triggering the directive, but rather the lack of vitality on the part of the patient. This is problematic in relation to the discussion above where disease type appeared preeminent and accompanying factors such as strength appeared to be disregarded, at least in terms of the duration needed for treatment. One might wonder, therefore, if that emphasis on duration is less about the preeminence of disease categories and more in order to make the point that, like men and other living beings, diseases too have a lifespan, so-to-speak—as if everything here rides on the rails of time.

Furthermore, in spite of the promise of a clear dividing line between curable and incurable, and presumably a clear line between whom to forsake and whom to cure, a closer look at the diseases being treated brings this into question. For one thing, some of the names of particular disease being treated would suggest that they are incurable if there is indeed a solid line between curable and incurable. For example, in the list of

[519] I am assuming *nisvāśa* is for *niśvāsa.*

fevers given certain durations until recovery as seen above, one that appears and is said to take ten days to cure is called *Anta-ga*, or the fever that goes until the end.[520] This certainly sounds like a terminal illness, for one who is *anta-gāmin* is said to be perishing. Elsewhere we are given a remedy that is said to eliminate *Ghāta-jvara*, i.e, the Killing Fever. Granted, though, a name may just be a name and not associated with the prognostications as stated in the KJ. However, additional evidence comes from the categorization given at the end of the list of fevers and their times to cure. At line 63, we are told: *marjādā saṃnipātānāṃ pratyekaṃ samudāhṛtā.* Or, every single landmark [fever] associated with humoral conjunction is mentioned.[521] Previously, a remedy was outlined for each of these fevers. And though the KJ does not make a direct statement about the status of humoral conjunction in respect to curability, we have seen previously that these diseases are associated with all three humors being in a disrupted state and were categorized by the CS as at least very severe and often as fatal. Three disrupted humors is as bad as things can get. Nevertheless, one could argue that these particular fevers are not the ones the KJ considers to be fatal. However, several remedies are given that are said to cure *every* fever. For example, at line 220 we read: *āmalaky-ādir ity eṣaṇaḥ sarvva-jvara-apahaḥ*. That is: The [remedy] which begins with Āmalakī, etc. is an iron arrow which removes every fever. A few lines above, at 217, we see a similar statement: *kṣīra-śeṣaṃ ca tat peyaṃ sarvva-jvara-haraṃ paraṃ,* i.e., and that residue of Kṣīra to be drunk is excellent for removing all fevers. Therefore, from as far as we can see, the incurables are still being treated and even cured. In this sense, then, the medicine

[520] Seen in line 59.

[521] I get this translation by taking *marjādā* to be equivalent to *maryādā*, as Platts' *Dictionary of Urdu, Classical Hindi, and English* does. See http://dsalsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.8:1:373.platts.

has not changed, but how is death perceived within this text, and what might the implications of those changes be?

THE CONCEPTION OF LIFE AND DEATH

Timing was mentioned above in relation to signs and symptoms. That is, it was imperative for a physician to witness symptoms within a framework of time. The importance of correct timing is also mentioned in the giving of remedies. For example, at line 105, we read: *auṣadhair maṃm atra vā ādaiś ca eka-dvi-try-aṃtare jvare.*[522] That is: By means of taking medicinal herbs at the right season and time, then, in respect to a fever, it is over in 1, 2, 3. One of the things such timing was previously associated with was catching a disease early. Though that is not explicitly mentioned here, it seems appropriate to assume that what is meant by the right time is one which is sooner rather than later. As we have seen in the CS, to save the falling pot, it is best to catch it before it falls, or barring that, just as it starts to go, before it gathers dangerous momentum.

Thus, protecting health is a matter of timing. But here we see an association of time with the very initiation of life. It is the generator: *kālaḥ sṛjati bhūtāni*.[523] Time emits or pours forth living beings. The sense of flow in the finite verb is key. Just as in the English word surge, there is a wave-like sense of swelling, rolling, sweeping forward. Time is the wave, as we see here: *kāle phalaṃti taravaḥ kāle vījāni vāpayet* / *kale puṣphavatī nārī* / *sarvaṃ kālena jāyate*.[524] In time, trees bear fruit; in time, seeds may be sown; in time, a woman flowers. Everything happens with time. In this sense, life originates at zero and moves across a piece of graph paper with set intervals. However, another way to render the last sentence in the verse would be: Everything is produced by

[522] I am taking *maṃm* as meant to be from *ma*, i.e., time, season.
[523] See line 2.
[524] See lines 8-9.

time. In that sense it is not merely substrate, but initiator. Therefore, it is not surprising that this wave may and will inevitably draw back what it once sent out. As the second line of the treatise moves into the third, we get that description: *kālaḥ saṃharati bhūtāni kālaḥ saṃharati prajā.* Time retracts living beings; time retracts [these, its own] progeny. The verb here, sam√hṛ, is not simply expressing a taking back; it is mirroring the initial motion. It is the opposite of the kind of unfolding the happens when something spills forth. Here the billows are condensed, compacted. We might say, then, Time crushes beings. Like a hand on a delicate piece of paper, time crumples its progeny. Yet, time erases its own tracks—with every step forward it becomes *and* perishes. We are told amidst a list of what time causes to cease: *tu so 'pi kālo vinaśyati*—but Time is also destroyed.[525]

Life as a wave that rolls out and is drawn back, might bring Arnold's "Dover Beach", the poem this dissertation opened with, back to mind. But here we have not made a perfect return in one sense. Early in this work, there was discussion of the human lifespan as ideally reaching 100 years. Here the ideal is tarnished. The last call is earlier: *varṣa-aśītaṃ tathā ca uṣṭyaṃ / pratyūṣaṃ madhyamaṃ dinaṃ / aparāhna tasya rūpeṇa kālaḥ kālena kathyate*.[526] Thus: And so, at the light of dawn, midday, or late afternoon of the 80th year, with the death of his form, it is said to be "his time." The duration is not what it once was. This clearly comes out of the idea that the vitality, and so lifespan, of humans decreases as the epochs progress. At the end of this chapter, dating of this treatise will be discussed along with its distance in time from the CS, but for the moment what is significant is that the decline of man is correlated with the advance of time, and that each epoch presents conditions which are worse than the last until the next cycle begins. This

[525] See line 6.
[526] See lines 7-8.

helps us to read the following statement: *prakṛti-sthaḥ sadā jīvo vikṛtiṃ ca eva ga*[*c*]*chati*.[527] In other words: And, thus, a living being in the natural state always undergoes a change [for the worse]. The concept of "for the worse" is encompassed in the general philosophy and in the word *vikṛti* which can also mean a change into a state of illness, or a warping or deforming. Thus, the constant change that all beings undergo is one away from a sound state. And this is the ever shifting ground upon which medicine must stand.

BEYOND TIME? BEYOND MEDICINE?

In a world that is ever changing, and ever moving toward the worse, medicine becomes a mere stopgap. Knowledge of time might help physicians with diagnosis, prognosis, and treatment, but it does not appear to hold the promise of the previously described rejuvenation therapies, which would somehow erase the steps of Time, or send the cycle in the opposite direction. However, health is nevertheless linked to time, not by medicine, but by recognition. After hearing of the destructive power of time, we are told: *sa ca vai kāla-dṛṣṭo sti kalā-tejo vicāryate*.[528] In other words: Granted, he who has seen time is caused to become radiantly healthy at that [very] moment. This returns us to the original question of what it means to know time. Is it not simply a matter of knowing its divisions and movements?

Perhaps the answer to this question can be found by examining those whom Time treats poorly. For example, we are told: *vikarmasya prabhāvena / naraḥ śīrghra vinaśyati*.[529] That is: By the force of wrong action, man is quickly destroyed. This is a common statement about karma and the results of one's acts; however, tied to Time, we

[527] See line 19.
[528] Line 20.
[529] See Line 7. I am taking *śīrghra* as meant to be *śīghram.*

now see bad actions as something which might tend to speed up its flow. Bad actions are the fast track to death. This idea is supported by a statement found at lines 81-2: *māsaiś ca jojāvaḥ sa ga*[*c*]*ched yama-śāsanaṃ*. As rendered in English: He who urgently drives onward by months will go to the dominion of Death. The fuel used to speed up time is described along with the recipe for slowing it down in lines 10 and 11: *krodha-lobha-prasaṃgena kālaḥ kālatimānavān* // *jñāna-yoge sadā atyasaiḥ kālo rakṣati sarvadā*. Though not entirely unproblematic, this verse appears to say: Through attachment to greed and anger, time is impelled onward. Through perpetually reciting in union with knowledge, time always preserves.[530] From this we see knowledge is only a part of the solution; it needs to be accompanied by action. In fact, there is no mention of ultimate release here. Actions are associated with fruits, as we see: *iṃdriyāṇi vaṃdhayitvā manaś ca eka-agra- kārayet* / *tena abhyāsena bhoktavyaṃ svargraṃ naraka-ādi-phalaṃ*.[531] That is: Having fixed the sense faculties, one ought to cause perception to be single-pointed; by repetition of that, the fruits beginning with heaven and hell are to be enjoyed. What the physician who sees time presumably sees is that action is its elephant goad; action drives time, speeding it up or slowing it down. The irony is that once one beholds time in this manner and can see fatal illness six months out, one is vibrantly healthy and no longer in need of any medicine. His remedies are of no use to him in so far as illness represents changes of time, and he has seen through Time.

THE TREATISE

When one chooses to translate a previous untranslated and little-known work, there can be surprises. The surprise in this case was that the text was not fully focused on

[530] I come to this translation by taking *kālatimānavān* as intended to be a possessive adjective of a present middle participle coming from a passive of the 10th class verbal root *kāl,* even though the form is not correct. I am also inclined to think that *aty-asa* is meant to be *abhi-asa.*

[531] See lines 39-40. *Agra* appears to have lost an anusvāra. I am taking *svargra* for *svarga.*

death. Nevertheless, it included enough information on it to add to this study in significant ways, and it proves to be a good companion text to the *Qabriya* for various reasons beyond death. However, a full discussion of the provenance and dating of this work would be out of place here, so that has been moved to appendix A. The transliteration appears there as well, as planned. But given that the bulk of the text does not deal with death, the full translation of the treatise will not be given. This will be part of a future project. Only the material directly related to this dissertation is included.

THE UNANI WORKS

Chapter 5: *Tarjamah Qānūn Sheiḵh Bū ʻAlī Sīnā*

The first Unani work to be considered is Ibn Sina's Arabic *al-Qānūn fi'l-Ṭibb* (Q) by means of Kantori's Urdu translation: *Tarjamah Qānūn Sheiḵh Bū ʻAlī Sīnā (tQ)*, that title simply meaning translation of the venerable Ibn Sina's *Canon*. As mentioned in the introduction, it functions as a parallel text to the *Carakasaṃhitā* (CS). As with the ayurvedic text, it is a comprehensive chronicling of the medical understanding of the day. In that respect, it is worth recalling that—in addition to Greek and Persian thought—Ibn Sina had access to the CS in Persian translation. Furthermore, as with the CS, there are reflections of both practice and theory, a distinction Ibn Sina addresses right in the first pages of the treatise. He states:

> *dar-ḥaqīqat donoṉ qismīṉ ʻilm-i ṭibb kī ʻamalī batīṉ haiṉ aur ʻalamī aur naẕarī meṉ farq ye hai ke jis qism ko ham naẕari kahte haiṉ is meṉ bayān uṣul qavāʻid kā hotā hai aur dūsrī qism jis ʻamalī kahte haiṉ is meṉ bayān kaifīyat mubāsharat aur isteʻmāl unhīṉ qavāʻid kā hotā hai.*[532]
>
> In reality, both parts of the science of medicine are practical matters and the difference between the "practical" and the "theoretical" is that this part which we call theoretical holds an explanation of the fundamental principles and the second part which we call practical holds an explanation for managing the situation and for putting those principles into use.

This statement suggests that ultimately both knowledge of principles and knowledge of technique are indeed practical because they both are used in understanding medicine so as to be able to treat a patient. At the same time, it acknowledges that precepts about managing a medical situation are once removed from actual application. In other words,

[532] Kantori 9. The original nasta'līq script has been Romanized for the reader's convenience. See Appendix B for the original script. Particularly note that some orthographic irregularities have been corrected in the Romanized form for ease of comprehension. For example, nūn ghunnā is never used in this Urdu text and a wide range of short words are fused. The script in the appendix is true to the original text.

both aspects of the science of medicine as given above guide the physician in what he will actually do, but neither is the act itself. Ibn Sina wishes to be clear about that distinction, and for us it is a good reminder that what is recommended and what is carried out may not be identical. We are looking at hypothetical situations, at best, not case studies.

Of the five volumes, the first, not surprisingly, deals with general principles. The second and fifth deal with medicines, with the first of these focused on simple ones and the latter one on compounded medicines. The remaining two volumes deal with disease. In a parallel manner, one could say the third volume deals with "simple" diseases because these are ones seen to manifest in a specific part of the body. The fourth volume, on the other hand, deals with diseases which are not restricted to a single site, thus complex or compound.[533] In the case of both disease and medicine, therefore, we move from the basic to the complex. However, one should not assume that only simple medicines were used for simple diseases and vice versa. That is not the case.

Our interest in the text is what we can learn about medical approaches to death, this purpose being served by the first volume. The path to this understanding is more circuitous in the Q/tQ than in the CS because here there is no special group of patients who, categorically speaking, are not to be treated. The dying are not automatically segregated, and we will examine some of the reason for this in the following discussion. Nevertheless, the points of interest in the CS and the Q/tQ are the same. That is, in order to come to an understanding of how dying patients are handled, we will look at the nature of death, lifespan, and clinical indications of illness. We will begin by looking at the kinds of death presented: natural, unnatural, and partial or pseudo death. We will then

[533] Kantori 8.

look at definitions of life and death in order to understand what is seen as the ultimate cause of a natural death. From there we will consider lifespan and its relationship to medicine. This will be followed by and examination of signs and symptoms, their role in medicine in general and their relationship to death. Factors beyond disease type and symptom which affect prognostication will be covered, as well as the nature of prognostication in general in this text and how that impacts care for the dying.

THE NATURE OF DEATH

A death which is not a natural one may have any number of causes, environmental being the primary one as it can cover both the immediate impact of a particular weather situation or location as well as diseases which are seasonally induced. For example, weather can be said to lead to this: *k̲h̲uṣūṣan shaivak̲h̲ ko kih un ke paṭṭhon̲ men̲ inṣebāb nuzūl hotā hai aks̲ar to ba-marg-i mufājāt mar jāte hain̲ is-liye kih masālik-i rūh men̲ hajūm nazlāt kā daf'atan ba-kas̲rat ho jātā hai*.[534] That is: [It causes] a descending flow in the nasal passages, especially for the elderly, who then often die a precipitous, sudden death because of the collection of excess rheum in the pathways of the vital breath. Sudden death is a special category within deaths which are not natural, but encompasses similar causes, such as the environmental. In the particular case above, it is worth noting that the demise is directly related to blockage of breath. This is not always the case. There is for instance advice given in regard to travelers that: *jis shak̲hṣ ko hameshah k̲hafaqān 'āriẓ hoa kare cāhiye kih apnī tadbīr kare aisā na-ho kih ekā ek mar jāe.*[535] In other words: In the case of a person who would always keep presenting with palpitations [of the heart], it is necessary to manage that so that he does not die suddenly. What treatment to apply is not mentioned at this point in the text, and the

[534] Ibid., 119.
[535] Ibid., 237.

underlying cause could, from today's view point, be from various factors such as dehydration, exertion, or fever. However, additional advice still pertaining to travelers given a few lines after this recommends a bleeding be done. We read: *jis vaqt badan bhārī ho jāe aur māndagī paidā ho aur ragīṉ phūl jāīṉ faṣd kholnī cāhiye tākeh koī rag nah phaṭ jāe aur saktah aur maut nāgahānī ʻāriẓ na-ho*.[536] And as translated: If the body should become heavy, fatigue arise, and vessels swell, it is necessary to bleed [the person] so that neither should a vessel burst and [the patient] have a stroke nor sudden death result. Taken together perhaps these point to altitude sickness Precautions for traveling in the cold and snow are given further on which may also suggest mountain travel.[537]

Sudden death is not only mentioned in relation to environmental factors. Individual actions can be a cause, such as in the case of excess alcohol consumption. The treatise states: *mutavātir be-hosh rahnā bahut burā hai is vasṭe kih jigar aur dimāgh ke mizāj ko fāsid kartā hai aur paṭṭhah ko ẓaʻīf kartā hai aur amrāẓ-i ʻaṣab aur saktah aur marg-i mufājāt paidā kartā hai*.[538] That is: To remain continually intoxicated is extremely bad because it corrupts the temperament of the brain and liver, weakens nerves, and brings about diseases of the nerves, stroke, and sudden death. This sudden death, then, comes after chronic misuse. Nevertheless, the long-term habit leads, in this case, to a precipitous end.

At some points, individual actions and environment meet. In the cases of the changing one's climate above, whether due to changing weather or an individual changing his location, treatment could be used to mitigate the effect produced. But, in

[536] Ibid.
[537] See Kantori, 239.
[538] Ibid., 223.

some cases, taking the wrong action after exposure can be what causes the death rather than the exposure itself. Take, for example, the following: *lūṉ mārne ke ba'd agar piyās kā ghalabah ho faqaṭ kullī karne par iktifā kare aur ser-āb ho kar pānī nah pīye varna us vaqt mar jāe gā balke kullī karne par jur'āt kartā rahe*.[539] In other words: After being struck by hot winds, if there should be overpowering thirst, he should be content with just gargling and not drinking water to slake thirst, otherwise, he would die right then. Instead, he should have the courage to just keep gargling. This statement is a bit different than the one above in that it does not have the weight of a long-term bad habit behind it. It is something a person could be experiencing for the first time, especially as this appears under the section on managing problems issuing from travel. The implication is that these regimes are ones the physician would be advising his patient to follow. In that sense, then, this is also a place where the physician's actions and the patient's meet as well. The physician may give the advice, but the patient has to follow it in order to live.

This is not to say that the application of medicine is necessarily danger free, as we will see. Nor is it to say that bad habits only lead to a rapid-type death. As for the latter, Ibn Sina warns: *jo shaḵhṣ burī ghiẕā ḵhā kar us ko haẓm kar le cāhiye kih apnī quvvat-i me'dī par nāzān na-ho kih 'an-qarīb ba'd thoṛe zamāne ke us ke badan meṉ aise aḵhlāṭ raddī paida hoṉ ge jin se mohlik bīmāriyāṉ qātil 'āriẓ hoṉ gī*.[540] In other words: One who digests bad food ought not take pride in his digestive power since after a very little while his humors will be ruined that way, from which deadly diseases will arise, killing him Bad habits can catch up with us and prove fatal. There appears to be a cumulative effect. As for dangers present in medical treatment, risk is evinced in the recommendation to have a counter remedy ready in case a first treatment attempt produces symptoms which

[539] Ibid., 239.
[540] Ibid., 216.

portent death. In this case the symptoms being referred to are ones seen after an unsuccessful attempt at inducing vomiting in a patient. The warning runs: *aur jis ko kaifīyat ʻāriẓ hoā dar-jald tadāruk nah kiyā jāe faurān mar jātā hai.*[541] That is: And for one presenting in such a state, if provisions are not made without delay, he will die immediately. Note that here the message is not one which implicates the physician in error. The redress needed, *tadāruk*, is associated with a passive clause. Additionally, there is no talk of ignorance, rather the danger is seen as a potential side-effect of a particular type of treatment not as the physician's lack of knowledge or of his taking inappropriate action. The application of medicine can be deadly; thus, the physician needs to be proactive. In regard to this patient, Ibn Sina states: *agar qai ho jāe aiḵẖtināq paida na-ho gā aiẓan ḥuqnah jo pahle se ṭaiyār rakhā hoā hai isteʻmāl karnā cāhiye.*[542] So in English: In case there would be vomiting, so that suffocation does not come about, it is necessary to use the enema, as above, which has been previously prepared and set aside. That a treatment can cause death is taken for granted. The physician's responsibility in relation to that risk is to be prepared for various outcomes.

In addition to reactions to treatment causing death, medicines themselves can be deadly. Drugs are placed in four categories from mild to lethal, with the lethal being considered outright poison. The text describes this final category is this manner: *cauthā martabah yeh hai kih us kā ẓarar mohlik hoā dar-mizāj ko fāsid kar de yeh ḵẖāṣṣīyat aur yeh sammīah kī hai*.[543] So: The fourth class is such that its harm would prove fatal by corrupting the temperament. This is the property of it, and this is poisonousness. That is, what is helpful eventually slides into what destroys life, upping the negative effect along

[541] Ibid., 261
[542] Ibid.
[543] Ibid., 131.

the way as its power increases. Powerful equals dangerous. Presumably, a physician would never be employing these out and out deadly substances, but in royal courts poisons and poisoning have long been a concern, and physicians have had central and highly coveted roles there, especially within the Islamic royal courts. As far back as the 4th Century B.C., Alexander the Great showed a marked interest in remedies for poison which may have been precipitated by his encounter with India, for reportedly, "in Persia the number of deaths in the Macedonian forces was comparatively small; in India the losses were enormous. This difference must be ascribed to the poisons which the Indians employed."[544] If it is true that the Indians were especially developed in their use of poisons, perhaps due to having access to a large number of naturally occurring ones in the local environment, this could have increased medical interest in this subject in neighboring Central Asia as well.

In sum, major causes of death are attributed to an individual's habits and actions, the action of physicians in so far as they apply potentially fatal treatments, medicines in that they slip into the realm of poison, and, of course, to physical trauma and disease stemming from one's environment. More will be said of disease types in a moment, but another category worth mentioning before that is pain.

Pain is recognized as a possible cause of death, and gives use a glimpse of the understanding of the mechanics of death. For instance, Ibn Sina states in regard to the effect of pain on the pulse: *jab us se ziyādah shiddat ho nabẓ meṉ tavātar paidā hotā hai us ke ba'd marīẓ halāk ho jātā hai*.[545] In other words: When the severity of that [pain] increases, a more reduced frequency arises in the pulse, after which the sick person dies. Here we see danger associated with an impaired pulse; however, that death is not overtly

[544] Elgood, 29.
[545] Kantori, 175.

expressed as the ceasing of the pulse. That is, he does not express the danger as the pulse stops, so the individual dies. Why might that be? More details are given in the following example:

> *aur jo vaja‘ shadīd ho akṣar qātil hotā hai aur kabhī pahle pahal yeh bāt paidā hotī hai kih badan sard ho jātā hai aur ek larzah aur jumbish sī paidā hotī hai kih us kī vajh se nabẓ ṣaghīr ho jātī hai. dalīl is kī yeh hai burūdat kā us qadr ghalabah badan par hotā hai ki us ke sabab se harārat-i gharīzī aur aṣlī ke bar pā karne se istighnā ho jātī hai ba‘d aisī hālat ke marīẓ kī maut vāqe‘ hotī hai*.[546]
>
> And when pain is severe, generally it is fatal. And right when the situation first arises, the body becomes cold and there is shivering and such shaking arises that it causes the pulse to become faint. The reason for this is that that amount of coldness overpowers the body so, due to that, it does away with the production of innate, essential heat; subsequently, the patient dies from this condition.

This statement is useful because it links the pulse and inner heat in relation to death. The ceasing of the pulse is certainly associated with dying and signals that death has come, but the direct cause is associated with heat. Because heat is not replenished, the patient dies. On this theoretical level, heat is the final determinant of life.[547]

Due to the fact that pain can cause death, treatment of it becomes essential. Nevertheless, it is not entirely straightforward, for a doctor needs to consider how quickly a medicine can act versus how long it might take for the pain to prove fatal. In this regard we are told: *pas cāhiye ḥadaṣ qavī ke ẓarī‘a se daryāft kare dū-yi muddat meṉ se kaunsī ṭūlānī hai ṣabāt-i quvvat yā zamānah baqā-i dard ya‘ne tā zamānah baqā-i waja‘ quvvat sāqit na-ho gī*.[548] That is: So he should, by means of robust intuition, discern with respect to the two periods which is longer, the continuance of vitality or the duration of the pain; that is to say, he should ascertain that vitality will not be lost during the time the pain

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[546] Ibid., 285.
[547] I say final not ultimate here because I think soul is conceived as the ultimate cause of life in a physical and metaphysical sense, but physiologically/ functionally, heat is the end of the line.
[548] Kantori, 285.

remains. What is at stake here is that the medicine be potent enough to act in time, but not so strong as to injure the patient. Here we begin to see, then, that not only is timing a consideration, but the overall good of the patient. In this regard, Ibn Sina states: *aur us kā bhī liḥāẓ kare kih ziyādah maẓarrat baqā-i dard meṉ hai yā davā-i muk̲h̲addir sarī‘ alāk̲h̲ar se jo maẓarrat paidā ho gī vah ziyādah hai aur phir jo aṣvab iṉ donoṉ meṉ hai taqdīm karnī cāhiye.*[549] In other words: And he also needs to pay attention to whether there is more harm from the persistence of the pain or more harm produced by the very rapid numbing medicine, and then he needs to give precedence to that which is the more proper of the two. One might tend to think that what is meant here is that you do not want to kill the patient with the cure while trying to save him from death; though that is certainly desirable, that is not exactly the issue here. The author points out again that pain can be deadly and adds: *aur dava-i muk̲h̲addir se halākat nahīṉ paidā hoti go aur ṭarḥ maẓarrat ẓarūr hotī hai,*[550] i.e, yet death will not be produced from the numbing medication, although some degree of injury from it is unavoidable. Given that desensitizing the area does not typically lead to death, causing the patient's demise by means of it is not what the physician is concerned with here (or, at least, primarily concerned with). It is another, lesser, harm that is being avoided. This gives us a glimpse of a treatment philosophy which we will return to in the final section of this chapter.

Our understanding of the mechanics of death is also advanced by considering incomplete or pseudo-states of death. For example, extreme exercise is said to lead to an apparent but not actual state of death in which every single sign of decline is produced (*jitne āsār ainsihilal ke haiṉ sab paidā ho jāte haiṉ*.[551]) One sign of approaching death

[549] Ibid.
[550] Ibid.
[551] Ibid., 174.

which we have already encountered is the pulse. In that case pain caused its dropping off. However, other causes are given for infrequent pulse, such as: *quvvat kā us miqdār par pahoṉcnā kih nabẓ-i ʻaẓīm ho jāe aur burūdat-i shadīd ḥājat-i iṯfā-i ḥarārat kī kam kar de. yā ba-darjah g̲h̲āyat suqūṯ-i quvvat ho kih marīẓ qarīb ba-halākat pahoṉce*.[552] The three given here are as follows: In the case of superior strength, that [an infrequent pulse] would be sufficient because the pulse is robust. Or extreme cold would reduce the need to quench heat. Or there would be a defeat of strength to such a great extent that patient would be on the point of death. Now what is meant in the first case is the force of the pulse allows less frequency. In the second case, the body processes have slowed down in general. In the third, we see a reduction in power tied to a less frequent pulse. This means that at least one of the signs of failing strength is a reduced pulse. We can assume, therefore, that in these states of extreme exercise, it might be difficult, or even temporarily impossible, to pick up on the pulse.

Another kind of partial death is the death of an individual part of the body. In the context of a discussion on paralysis, Ibn Sina distinguishes between the life-giving properties of the nutritive and vital faculties. He writes that while the nutritive force remains, the organ remains alive, and at which time when the nutritive force would come to naught, the organ would likewise die: *jab tak quvvat-i tagẖẕiyah kī bāqī rahe ʻaẓv bhī zindah rahe aur jis vaqt quvvat-i tagẖẕiyah kī bāṭil ho jāe ʻaẓv bhī maiyit ho jāe*.[553] But, on the other hand, he states: Often the action of the nutritive force remains, yet the organ nevertheless dies: *aur beshtar quvvat-i tag̲h̲ẕiyah kā feʻl baʻẓ rahtā hai aur ʻaẓv maiyit ho jātā hai*.[554] In other words, digestion is working but something else is lacking, i.e., the

[552] Ibid., 169. Note that organ is meant here in a very general sense; ʻaẓv can mean organ, limb, or joint. Sometimes I will translate it simply as body part.
[553] Ibid., 94.
[554] Ibid.

vital faculty. That is, both these faculties are necessary for its continuation, at least in the long term. This is noteworthy in that conceiving of a part of the body as being able to die in addition to the body as a whole gives us a particular view of death: life equals function, death the cessation of function. And this holds whether for a part or the whole.

However, the death of an individual organ is not always consistent with continued life. We see this under a discussion of kinds of disease. Three kinds of simple diseases are given, with complex disease being some combination of the simple ones. The basic types are disorders of temperament (*mizāj*) and structure (*tarkīb*), and loss of contiguity (*ittiṣāl*).[555] What is meant by the first of these terms is akin to *doṣa* in Āyurveda in that it means a disturbance to the humors which constitute the temperament. How that disturbance is visualized, though, may not be identical. Here the term imbalance fits well, as we will see below. The second type of disease is more obvious, and includes abnormalities of size, shape, position and so forth. It is under the final category of disease that we hear about organs and fatality: *har ek ʻaẓv inḥelāl fard aur tafaraq ittiṣāl kā mutaḥammil nahīn̲ hai maṣalan qalb agar us meṇ tafarq ittiṣāl ho sāth hai maut vāqeʻ ho jāe gī.*[556] That is: Not every part is able to bear having a detached piece or loss of continuity, for example, the heart. If it were to have a breach, death would come along with it. What is meant by loss of contiguity, then, is a rupture or a break. The heart dies as a result of this type of disturbance as opposed to a bone which may heal. The heart, being one of the vital organs, in ceasing to function, leads to the death of the whole.

In addition to diseases leading to death, there is also the concept of a natural death, as mentioned above, which is not disease related *per se*. It is described as follows: *āk̲hir-kār jab yeh tajfīf tamām hotī hai aur ruṭūbat-i aṣlī fanā ho jātī hai us vaqt maut-i*

[555] Kantori 99.
[556] Ibid., 101.

ṭab'ī vāqe' hoti hai.[557] Or: In the end when the drying out is completed and the innate moisture ceases to be, at that point natural death occurs. Nevertheless, heat is still given as the final blow, being compared to the flame of a lamp which necessarily goes out once the liquid fuel is gone. Loss of this fiery (*nārī*) heat means the loss of life.[558] A diagram may help to illustrate the relationship between these two qualities of moisture and heat.[559]

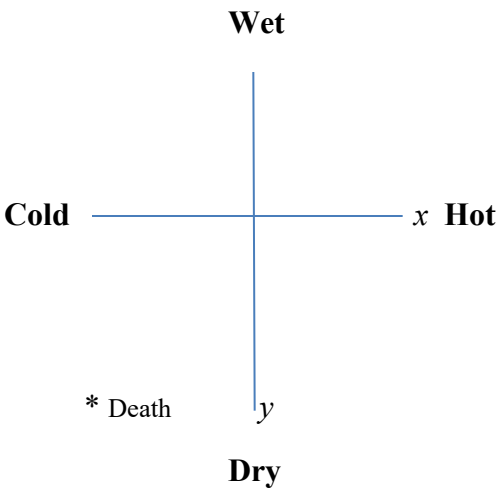

Figure 1: Intersecting Qualities

There are two gradients: one being the relative degree of moisture, and the other of temperature. They are not entirely independent as we see above because when moisture is at a zero state, heat must also be. As employed, the characteristics are only positive. You can have more or less heat, or more or less moisture; dry and cold are merely relative lacks of a positive thing.[560] The asterisk at the lower left corner, therefore, illustrates the condition when there is an absolute lack of moisture and warmth. It represents death. A

[557] Ibid., 196.
[558] Ibid.
[559] This is of my own design to help illustrate these concepts.
[560] This, of course, differs from a typical *x*-*y* axes representation where the center would be zero. It does represent a kind of zeroing in that it is a mean.

point at the lower edge of the y axis just above the word dry, for example, could not represent natural death with the information we have been given because that point would represent a total lack of moisture where some heat would still be present. Furthermore, it would not be a possible state for any being, living or dead. To illustrated this further, we see Ibn Sina, in the context of describing the difficulty of dealing with various disorders, state:

> *ḥāṣil yeh hai kih tas̲kh̲īn bārid kī ibtidā me̲n āsān-tar hai bah nisbat tabrīd ḥārr ke ibtidā me̲n magar tabrīd ḥārr kī intihā me̲n agarce dushvār hai lekin phir bhī āsān hai bah nisbat tas̲kh̲īn bārid kī intihā me̲n is-liye kih burūdat jis kā zamānah ḥadd se gu̲z̲ar jāe aur intihā ko pahon̲ce goyā maut ṯabī'at kī vahī hai aur maut ko apne sāth khainc lātī hai*.[561]
>
> The upshot is this: in the beginning, warming a cold [temperament] is easier than cooling a hot one, but at the end cooling the hot, although difficult, is nevertheless easy in comparison with warming the cold since at this point coldness would cross beyond the limit and by its termination arrive at the death of temperament itself, as it were, and, by that, dragging [the individual's] own death along with it.

There are several points to make in this regard. When we talk about "beginning" we are talking about time—the onset of a disease—but the fact that both types are quite difficult to deal with in the last stage, also tells us that we are concurrently talking about magnitude. The extreme cold spoken of is the cold found at the very end of the survivable temperature gradient. Advanced time correlates with increased intensity. What might this description of natural death tell us about life and lifespan?

THE INGREDIENTS FOR LIFE AND THE NATURE OF LIFESPAN

Why crossing a temperature threshold would result in the death of one's temperament is best seen through the humors given that the temperament is just an expression of a particular tendency of combination in those humors. Relating the humors

[561] Kantori, 248.

to the *x* and *y* axes illustrated above, we can see that each of the humors occupies a specific quadrant. The reason for this is that a humor has a combination of relative degrees of moisture and temperature. So, the top, right-hand quadrant is the one which represents the blood humor because blood is warm and moist. The lower right, on the other hand, is occupied by yellow bile which is warm and dry. The top, left-hand quadrant which represents what is cold and wet is phlegm, while the lower left being cold and dry is for black bile. Once again, this might best be visualized with the help of a diagram.

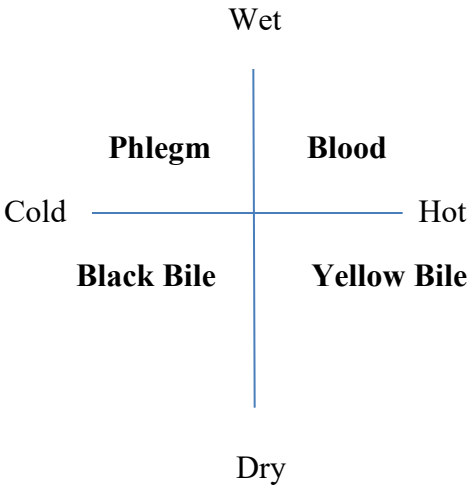

Figure 2: Humoral Quadrants

Thus, the quadrants each represent one type of the four basic temperaments. The number of possible individual temperaments, however, cannot be specified, for depending upon the degree of each quality, their interaction could place an individual anywhere within a given quadrant. Only the absolute lack of warmth and moisture in the far lower left corner is not consistent with life. Where birth and middle age might lie upon this diagram and what that might tell us will be discussed shortly.

First, though, what is obviously lacking in this schema is breath, an element we have seen already associated with sudden death above, and intuitively a part of any model of life. Within the system of Ayurveda, the wind humor correlates with breath. But that humor is lacking here. Instead there is blood, the hot-wet antithesis of death. Furthermore, there are two biles rather than one. One could attempt to argue that in Ayurveda the association of bile with *Agni*, i.e., with fire, makes it the hot-cold continuum while phlegm and lack thereof represents a wet-dry continuum. But that does not take care of breath/wind which in Ayurveda interacts with the other two humors. To make a diagram of that three-way interaction, one could add a *z* axis to the *x* and *y* ones illustrated, ending up in the world of three-dimensions with a sort of six-armed, spiny star. However, as I have argued elsewhere, the understanding of the three humors seems better visualized as a tripod, if visualized at all.[562] Setting aside for the time being the tantalizing question of what relationship these two systems of humors might have, the question that remains urgently relevant is what role, if any, does breath have in *this* system? For our primary interest is in these humors as they relate to life and death.

That question is partially answered by the following:

> *aur jis vaqt ḥarakat-i rūḥ kī ṭaraf k̲h̲ārij ke hotī hai—andar jism kā sard ho jātā hai aur ak̲s̲ar jab ḥarakat ba-ifrāṭ hotī hai daf'atan taḥlīl arvāḥ kī ho kar ẓāhir aur bāṭin donoṉ sard ho jāte haiṉ aur us ke ba'd g̲h̲ashī-yi 'aẓīm yā maut vāqe' hotī hai. agar ḥarakat-i rūḥ kī andar kī ṭaraf ho us ke tabe' barūdat ẓāhir aur ḥarārat bāṭin hotī hai. aur kabhī aiḥtiqān-i rūḥ kā ba-shiddat hotā hai to ẓāhir aur bāṭin donoṉ sard ho jāte haiṉ un kā ba'd bhī yā g̲h̲ashī-yi 'aẓīm yā maut vāqe' hotī hai […] aiḥtiqān aur taḥlīl jo ūpar bayān hai jin kī vajh se g̲h̲ashī yā maut 'āriẓ hotī hai vah ba'd si ḥarakat-i rūḥ ke vāqe' hote haiṉ jo daf'atan ho*.[563]
>
> And whenever there is movement of the vital breath in an outward direction, cold occurs inside the body; and, generally, when the movement is abundant, suddenly

[562] Kathleen Longwaters, "Shelters of Life, Bars to Death: The *Tridaṇḍa* as a Simile for Life in an Early Sanskrit Medical Text," 2016.
[563] Kantori, 128.

> breaths are unhinged; then both the exterior and interior get cold followed by severe loss of consciousness or death. But were the movement of the vital breath to be in an inward direction, the exterior gets cold and the interior hot. And sometimes there is violent clogging of the breath such that both the interior and exterior become cold, followed by either a severe loss of consciousness or death […] The clogging and unhinging mentioned above which cause the loss of consciousness or death happen right after sudden movement of the vital breath.

It must be noted that pneuma, or the vital breath, is not simply and only breath. But considering just that aspect of it for the moment helps to tie the understanding of breath to death. In both case above, dispersion and suffocation (unhinging and clogging), breath is prevented from functioning normally, even though what prevents that functioning comes from opposite forces. In one case, pneuma is stuck outside of the body; in the other, it is trapped within. Nevertheless, in each case the cessation of function gives the same result: inner heat is lost. The mechanics of it are such that the excessive motion of outbreath chills the interior of the body, while the seizing up of the inbreath prevents a continued supply of warmth from being brought in, resulting in loss of heat. The loss of heat equals death, as we have said previously.

This is an explanation that attempts to go a step further than the concept of the breath stopping and the body dying. It asks the question why—why does the cessation of breath result in death?—and the answer found is temperature related. Above, it was a total lack of moisture than resulted in a total loss of heat, but does the reverse hold true? That is, does a total loss of heat always simultaneously drive one to a total loss of moisture? Or in visual terms, would a point on the left-hand edge of the *x* axis placed next to the world ‘cold’ be a possible representation of death? In this more recent example, moisture is not mentioned, so it may not matter what factor drives one to the loss of heat. Once again, heat seems to be ultimately the most important factor. However, the topic of moisture comes up again in the context of natural death and points to an answer.

First of all, in the part of the text which deals with hygiene, the inevitability of death is highlighted. The title of the first section of this part is *mufrad sabab ṣeḥḥat aur maraẓ aur ẓarūrat ke bayan haiṉ*, i.e., On the Explanation of the Sole Cause of Health and Illness and the Necessity.[564] The necessity being spoken of is the necessity of dying. Death is an unavoidable, natural process. Once again, a diagram might be instructive in visualizing life as a process while relating it to the other information on death which we have already considered.

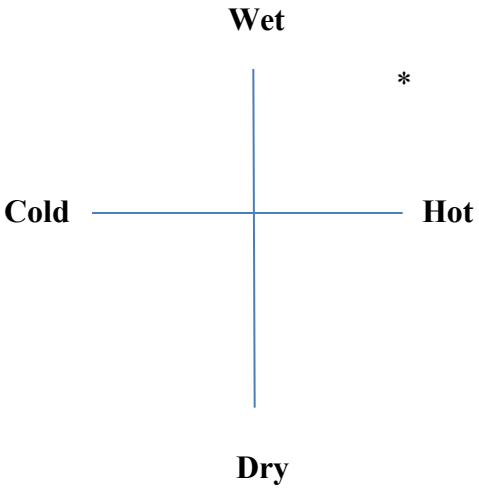

Figure 3: Childhood, Approximated

Ibn Sina notes that all agree that children from the period of infancy until youth have an excess of moisture.[565] He presents several views, though, on heat and that stage of life. In the end, we see that he agrees with Galen that this period is the stage of life when heat is the greatest.[566] This is further supported by the description of aging given there. The

[564] Ibid., 194. This title raises the question of what the *sole* cause is. In this context, I believe the simple answer is meant to be the hygiene seen in its broadest sense. The ultimate answer, though, as we will see, appears to be heat.
[565] See Kantori, 21.
[566] Ibid., 21-22.

author writes: *ḥarārat-i g̲h̲arīzī ba'd muddat san-i vuqūf ke nuqṣān shurū' kartī hai us sabab se kih us ke māddah-i ruṭūbat ko havā kih jo muḥīṭ badan-i insān hai jaz̲b kartī hai aur ḥarārat-i g̲h̲arīzī-yi havā ke jaz̲b ko andar se mu'īn hotī hai*.[567] In other words: The depletion of innate heat begins after the period of stasis [and is] due to wind upon the substance of moisture, which by surrounding the human body absorbs that [moisture], and also due to wind absorbing it from within assisted by the innate heat. What is meant by "the period of stasis" is childhood and youth when moisture is abundant. Here, as also seen previously, a loss of moisture drives a loss of heat. Thus, one can place an infant up in the far right-hand, top quadrant, in the region of warm and moist. Though perhaps not always in an exact mirroring of the dual null point of natural death (no heat and no moisture), it is roughly speaking so. Therefore the passing of years, being described as a mutual reduction of these two characteristics, would lead one, all other factors being equal, on a downward diagonal. Theoretically speaking this would, at some point, cross through the perfect balance point at the central intersection, and then continue downward toward death, as in Figure 4.[568]

[567] Ibid., 22.

[568] See Kantori, page 23, for a discussion of the middle-aged being both drier and colder than the young.

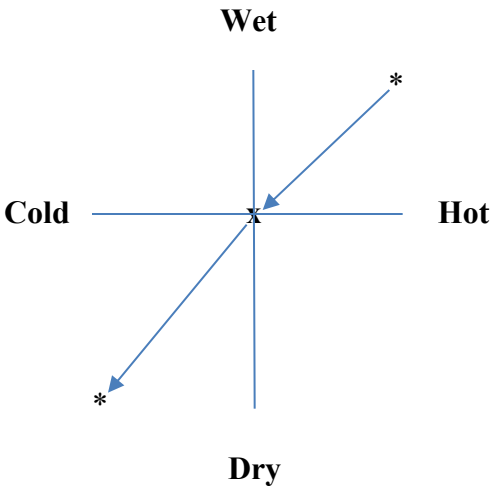

Figure 4: Aging

In relation to this, Ibn Sina writes:

> *yahī nuqṣān-i ḥarārat raftah-raftah maut-i ṭab‘ī tak pahoṉctā hai jis kā zamānah har shaḵẖṣ ke vāsṭe ba-ḥasb us ke mizāj ūlah ke muqarrar hai. ‘āmm ḥadd is zamānah kī jab tak hai kih quvvat-i ṭab‘ī ḥifẓ-i ruṭūbat kar sake insān meṉ har shaḵẖṣ ke vāsṭe ajal musammā muqarrar kī gaih kih vah ashḵẖāṣ insānī meṉ ba-nazir iḵẖtilāf amzijah ke muḵẖtalif hotī hai*.[569]
>
> This very depletion of heat goes on and on until natural death is reached, the time of which is settled from the start for every individual according to his primary temperament. The ordinary extent of this time is as long as moisture is able to be preserved through the power of the temperament such that for every single person the so-called appointed time has been fixed with disparity among to those individual persons being due to difference in temperaments.

There are two points to note in his summary. The first is the concept of moisture as we have been discussing: the length of one's life is related to the ability to protect oneself against the loss of it. The moisture we need to guard inevitably decreases as life progresses. In this sense life is water, and the draining off of life is that loss. Aging equals desiccation. With just this information, we end up with a trajectory of life which is a

[569] Kantori, 23.

straight line moving at a diagonal across the square formed by the quadrants as depicted above.[570]

This image brings to mind the Socratic dialogue *Meno,* for there a slave boy is tasked with telling what the length of the diagonal of a given square would be. Socrates guides him through the problem with questions as is his wont. There the answer is not a simple number such as two or four, rather it is a ratio. I raise this here because the obvious question that comes up when one says the length of life is fixed and that it is different for different individuals is: What is that length? How long will his or her or my life be? Can this question of lifespan be solved?

These physicians were spared that question to some extent because the second point to note about the passage above is that everyone's time varies according to his primary temperament. What that means is that though in some idealized sense life equals a perfect diagonal, few individuals, if any, would actually experience that. Temperament means different individuals have a propensity to end up in one quadrant rather than another. And though a given individual might have more heat and moisture as a child than as an adult, the starting point may be far from the ideal. Actions and experiences can also impact one's location in the scheme. Thus, even though there is a point of perfect balance in the dead center of the square, and even though in theory one could hit upon it at the dead center of one's life, Ibn Sina remarks that humans do not tend to occupy that point, though some may come close. He writes:

> *har e'tidāl kī ek ḥadd-i k̲hāṣṣ muqarrar nahīn̲ hai aur nah vāsṭe har ṣeḥḥat ke ek hī ḥadd-i mu'aiyan. aur nah yeh bāt hai kih har vāḥid mizāj kā us bāt men̲ dāk̲h̲il hai kih us ke vāsṭe ṣeḥḥat kisī ṭarḥ kī yā e'tidāl kisī qism kā 'alā-i'l-iṭāq s̲ābit kiyā*

[570] It may also be worth noting that this provides a physiological link to the religious concept of a God-given, fixed lifespan.

> *jāe balke ek amr darmiyān do amroṉ ke pāyā jātā hai yaʿne baʿẓ amzijah par yeh bāt ṣādiq ātī hai kih us par g̲h̲āliban ṣeḥḥat yā eʿtidāl kā iṭlāq kiyā jātā hai.*[571]
>
> There are no particular bounds set for each equilibrium, nor are there designated bounds for every health. Neither is it the case that every, single temperament is absolutely fixed in regard to these matters of some manner of health and some kind of equilibrium. Rather, one occurrence lands in between two others. In other words, this matter is proved by sundry temperaments which [even] with that are mostly healthy and the equilibrium corresponds.

This means that my state of health and yours may not look the same. And as for that bull's-eye at the intersection of temperature and moisture, we most generally flutter about it like bees around a flower. Few settle there, and one's own center of health may even shift over time. But our interest here is how this relates to the conception of lifespan.

As we have been saying, these are the natural deaths. Ibn Sina goes on to state: *aur is ʿālam meṉ g̲h̲air-ṭabʿī bhī ajal vāqeʿ hotī hai kih vah ṭabʿī se alag hai aur har ek kī ek miqdār judā-gānah hai.*[572] That is: And in this world unnatural deaths also occur which are different from the natural, yet every single term of life is particular. "Particular" implies that the length of life is predetermined in either case, in a natural or unnatural death—an implication strengthened by echoes between miqdār (مقدار), measure or term of life, as seen here, and muqaddar (مقدر), decreed by God or Fate. Both stem from the same verbal root and find both of these meanings shared in the feminine noun *qadr* (قدر). From a medical standpoint, then, this raises issues similar to those grappled with in the CS. For if life span is fixed, what is the use of medicine? And if all lifespans are predetermined, why would one have to worry about the possibility of accidents? There would be no need to be cautious around wild horses or on icy slopes. Either it would be written, or not.

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[571] Ibid., 197.
[572] Ibid., 23.

Still under the general heading on hygiene, Ibn Sina addresses these very questions. He states: *aur ṣinā'at ḥifẓ-i ṣeḥḥat kī aisī nahīṉ hai kih maut kī ẓāmin ho yā badan ko āfāt ḵẖārijīh se bacātī rahe aur nah aisī yeh ṣan'at hai kih har ek badan ko 'umr ṯab'ī tak jo munāsib nau'-i inṣān ke 'ala'l-iṭlāq hai pahoṉcā de*.[573] In other words: The craft of hygiene is not the kind of thing that would be a surety against death or keep one safe from external dangers to the body, nor is it the type of craft which would cause each body to universally reach the natural lifespan congruous with mankind. What is translated as hygiene here, *ḥifẓ-i ṣeḥḥat*, literally means the preservation of health. So the craft being spoken of is broadly speaking the art of medicine in general. Thus, unlike Ayurveda, this medicine is not trying to make claims about its ability to extend life. It cannot promise anyone the maximum possible human span, let alone extend that, because the maximum human span would remain only individual in a system where the length of each and every life is fixed. And that cannot be lengthened. In other words, just because someone in your town lives to be 100, that does not mean that that is even a possibility for you.

So, what is the use of this craft? The answer is that it only guarantees two things. Namely, that putridness would not be allowed to enter the moisture and moisture would be defended from rapid dissipation. In respect to the power of this moisture, the situation is this: it remains for as long as this moisture remains in accord with that required by one's initial temperament: *ruṭūbat meṉ 'ufūnat nah āne de aur ruṭūbat kī ḥimāyat aisī kare kih us meṉ taḥlīl jald nah āne pāe hāṉ ruṭūbat kī quvvat/qūt meṉ yeh bāt hai kih us muddat bāqī rahe jis ko ba-ḥasb apne mizāj avvalī ke yeh ruṭūbat muqtaẓī hai*.[574] Note that heat is not what is being protected; it is moisture. Note also that the innate moisture

[573] Ibid., 196.
[574] Ibid. Note that *hāṉ* in this passage is a contraction of *yahāṉ*.

is described as especially powerful and enduring. In this sense, it reminds one of those few precious drops of *ojas* which are said to reside in the heart and are requisite for life. However, such a specialized, low-volume amount localized in the body is not explicitly mentioned. Furthermore, as opposed to those few precious drops, individual beings here, having varied temperaments, therefore have a varied initial volume, so to speak. In simple terms, some folks might have a fifteen-gallon tank and others a twenty. Additionally, we find elsewhere the suggestion that some of that initial moisture can be lost without immediately endangering life.

The author goes on to explain how the two-fold task of medicine is carried out, addressing the second task first:

> *Aur yeh kẖvāhish ruṭūbat ke bāqī rahne meṉ us muddat tak ba-tadbīr ṣā'ib pūrī ho saktī hai vah tadbīr yeh hai kih istibdāl badl mā-taḥlīl kā ba-qadr imkān hoā kare aur jitne asabāb ba-'ajalat tajfīf paidā karne-vāle haiṉ un kā gẖalabah nah hone pāe nah yeh kih asabāb-i tajfīf ke muṭlaq paidā nah hone pā'iṉ aur aisī tadbīr kī jāe jo taulīd-i 'ufūnat se bacā kar ẓamānat aur ḥirāsat badan kī gẖalabah ḥarārat-i gẖarībah se kẖārijān aur dākẖilā kare us vāsṭe kih tamām abdān quvvat-i ruṭūbat aṣlī aur ḥarārat aṣlī meṉ barābar nahīṉ haiṉ balke asabāb meṉ abdān mukẖtalif haiṉ pas har ek badan ke vasṭe ek ḥadd-i mu'aiyan hai kih usī ḥadd tak muqāvamat aur muqābalah us kẖushkī aur jafāf kā kar saktā hai jo kẖushkī ba-naẓr muqtaẓā-i mizāj aur ḥarārat-i gẖarīzī aur ruṭūbat-i gẖarīzī us badan ki vājib hai aur us ḥadd se baṛh kar muqābalah nahīṉ kar saktā lekin kabhī us ḥadd se beshtar aur us zamānah se pahle bah sabab vuqū' aise asabāb ke jo mu'īn tajfīf par hoṉ yā ba-vajh dīgar mohlik hoṉ ba'ẓ abadān ko tāb-i muqāvamat kī saqiṭ ho jāti he*.[575]
>
> And in regard to the desire to preserve moisture, for that course of action to be able to be fully effective, lifelong, a substitution is made, to the extent possible, for what dissipates, as well as not allowing those factors which give rise to rapid desiccation to dominate—what is not possible is to have absolutely no causes of drying come about. And that very course of action which guarded against the production of putrefaction ensures surety and protection for the body from foreign heat, externally and internally. For bodies do not have the same strength of innate moisture and innate heat, rather in respect to such factors bodies are diverse. For

[575] Ibid.

> every single body there is fixed limit, which up to that very limit is able to withstand and oppose that dryness and aridity according to the inclination of the temperament, the innate heat, and innate moisture proper to that body; and having exceeded this limit, resistance is no longer possible. Nevertheless, sometimes bodies would lose the ability to resist heat well before that limit and time due to factors which assist in desiccation or are in some other way fatal.

This is consistent with the picture above of a gradual loss of moisture over the period of one's life. The loss is dealt with by the dual approach of guarding what is held and replacing what is lost. However, because there are things which are normal causes of drying, the implication is that the protection can never be 100% effective; thus, we see the angle of decline. In regard to heat, we learn here that foreign heat can invade one's body. It can fill the role of either internal or external heat. This also demonstrates the important point that these two gradients of moisture and temperature have both an aspect of quantity and of quality. Putrefaction impacts quality, desiccation quantity. Therefore, both of these aspects need to be protected. Finally, in respect to the question posed above—what is the value of this medicine if lifespan is fixed—one might argue that though lifespan cannot be extended, various factors can cut it short. One has a fixed time, but it is a maximum; it is not guaranteed. This medicine, therefore, is meant to allow the individual to reach his or her maximum and to be healthy along the way. This argument is not entirely unproblematic give the statement above (*ek miqdār judā-gānah hai*) which suggests that the term of one's life is fixed whether the death is a natural or unnatural one. In this case the medicine seems more provisional, with the logic running something like: We do not know how long a particular life might last, but we do know that it cannot continue without a supply of liquid fuel, so to speak; therefore, we had better preserve

what is in the tank so that that does not fall short of the possible length of our road of life. Here it would still be a matter of striving to reach one's maximum life, but what would cut that maximum down gets inverted. With the first argument, it appears that what would cut short a life is all that is associated with an unnatural death, while with the second, it seems rather that this life cut short would be a *natural* one given the definitions above. The fuel in his tank would be gone or corrupted. And the one who died by an accident would be meeting his own time. Do we see further support for this idea?

A succinct definition of this medicine is given as follows: *ṭibb aisā 'ilm hai kih jis se insān ke badan ke ḥālāt az qabīl ṣeḥḥat aur zavāl-i ṣeḥḥat daryāft hote haiṉ fā'idah is 'ilm se yeh hai kih ṣaḥīḥ ādmī kī ṣeḥḥat kā ḥifẓ kiyā jāe. aur bīmār kī ṣeḥḥat jo zā'il ho cukkī he vah pher lāī jāe*.[576] That is: Ṭibb is that science from which the conditions of health or decline of health of the human body are ascertained; the use of this science is to preserve the health of a sound person. And to bring back again the already vanished health of an ill person. As we saw above, preserving and restoring were related to the characteristics which impact life; thus, preserving health is equivalent to preserving and restoring the physical attributes that allow its proper environment. And preserving health in this manner is how life is preserved. There is not something additional beyond this which is done which can boost life; there are no additional factors to work with except in so far as they impact these fundamental ones.

This definition of the medicine brings us back to the division of the theoretical and practical, recalling that the practical was distinguished from actual practice. It is

[576] Ibid., 8.

under discussions of practical knowledge that medicine dealing with preserving is divided from that pertaining to restoring. That part which deals with preserving is called hygiene, which as we have seen above comes from *ḥifẓ-i ṣeḥḥat*, literally meaning preservation of health. This circular definition does not give us any new information, but what is covered by the term is close to the idea of regimen. It is described as knowledge of the course of action for sound bodies (*ʻilm-i tadbīr abadān ṣaḥīḥ*), while the restorative aspect is said to be knowledge of the course of action for an ill body *(ʻilm-i tadbīr badan marīẓ*)—how to bring the ill body to its own state of innate health (*badan marīẓ kis ṭarḥ apnī hālat ṣeḥḥat aṣlī par lāyā jātā hai*), also called treatment *(ʻilāj*).[577] The difference between these two parts is the direction rather than type of action. By this I mean that both regime and treatment concern themselves with the qualities present in the body, but in the first case one wants to keep the environmental *status quo* and in the other one wishes to change it. In relation to changing that environment, we read: *jab qism maraẓ par ā gā-hī ho jis vaqt kaifīyat maraẓ pahcānī jāe vājib hai kih davā mukẖālif kaifīyat-i maraẓ ke ikẖtiyār karīn is-liye kih ʻilāj maraẓ kā biʼaz-ẓidd hotā hai aur ḥifẓ-i ṣeḥḥat biʼal-misl kiyā jātā hai*.[578] In other words: Right when some kind of illness arrives, it is necessary at that point to discern the nature of the illness in order to make the choice of the medicine opposite to the nature of the illness because the opposite is the cure for illness while the similar protects health. So we see these two aspects of medicine do not differ in what they adjust in order to keep the body working, just how: they move in

[577] Ibid., 194.
[578] Ibid., 248.

opposite directions. It might be worth noting here that this places the medical treatment of Ṯibb squarely in the realm of allopathic rather than homeopathic medicine.

The duration of life is said to be related to just how successful these efforts are, and the primary instrument used in the adjustments is food: Lifespan is linked to diet. The reason given for this is as follows: *istibdāl badal mā-taḥlīl is ruṭūbat kā jo ba-ẕarī'ah ghiẕā vaghaira ke hotā rahā hai*.[579] That is: This moisture remains because it keeps on being replaced by food and so forth in exchange for that which dissipates. Water in and of itself is insufficient for replenishing inner moisture. An understanding of this matter is enhanced by a common image from Urdu and Persian poetry where a lamp or candle represent life. Mir, for example, writes: *sham'a hī sar nah de ga'ī bar-bād / kushtah apnī zabāñ ke ham bhi haiñ.*[580] Or: The candle did not just go and give up its [bright-]tip to the wind; it wiped itself out by means of its own tongue—as do we. Here Ibn Sina uses the image of a lamp to similarly describe lifespan: *aur kamī ruṭūbat-i gharīzī meṉ jo ba-manzilah māddah yā raughan carāgh ke paidā hotī jātī hai*.[581] That is: Innate moisture is reduced like that of the source material, or oil, in a lamp. In both cases, the message is clear: the length of one's life is limited by the presence of a fuel. Furthermore, he goes on to use the metaphor of the lamp to describe the difference between foreign and innate moisture in the body and how it is that one is requisite and the other harmful. He states: *essā khayāl kiyā jātā hai jesse ruṭūbat mā'ī carāgh kī baṛh jāe pas agar fatīlah pānī se*

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[579] Ibid., 196.
[580] This verse is as it appears in the Mir thematic pages of Pritchett's website on Urdu poetry: http://www.columbia.edu/itc/mealac/pritchett/00garden/11c/1185/1185_02.html. The translation is my own.
[581] Kantori, 195-6.

tar ho jo be kaifīyatī aur burā'ī ishte'āl carāgh meṉ paida hotī hai kih kabhī raushnī detā hai aur kabhī qarīb bujhne ke ho jātā hai.[582] In other words: The idea is just like with the increase of watery moisture in a lamp: if the wick gets wet, it lacks a flourishing nature and is harmful to the light of the lamp which sometimes gives illumination and sometimes is extinguished by the foreign [moisture]. Thus, the innate moisture is the liquid fuel while the foreign is just a wet blanket; it causes life to sputter. This leads us to understand that integrating what comes from without into the body is key. The irony of all lamps, though, is they light their way to their own end. Medically speaking tQ describes the cessation of life in just this manner: *ruṭūbat-i gharīzī ko fanā kartī hai jesse carāgh apne āp ko ḵhud hī bujha detā hai jab apne māddah ko ya'nī ruṭūbat-i raughan ko fanā kar de*.[583] So: It [the innate heat] is annihilated in relation to innate moisture in just the manner in which a lamp extinguishes itself when its own source material, i.e. the liquid oil, ceases to be. This means that living is the cause of death, at least in so far as we are referring to natural death. This image also helps to explain why a state of zero moisture means a state of absolute cold. When the fuel, i.e., the moisture is gone, the flame, i.e., the heat ceases. This also makes it seem likely that the inverse is not necessarily so, meaning that a lack of heat does not necessarily drive the body to a lack of this innate moisture. That is, the flame can be caused to cease through other means than lack of fuel (We could give our bright-tip to the wind.) Thus, referring back to Figure 1, while a state with some heat but no moisture (an asterisk located on the *y* axis just above

[582] Ibid., 196.
[583] Ibid., 195.

the word dry) is impossible, a state with some moisture but no heat is conceivable as another point representing death (with the asterisk located on the *x* axis next to the word cold.) The distinction, of course, is the asterisk in Figure 1 indicates a natural death, a zero state for heat and moisture whereas an asterisk by the world cold would represent an unnatural death.

There are two points of interest in this regard. One is that moderation becomes a natural support for the preservation of life given that a person is perceived as having a certain sized fuel tank which can only partially, inefficiently, and not endlessly be refilled. The second point has to do with how the fuel is perceived. Why is this a lamp rather than a candle? Obviously, it has to do with the nature of the fuel. The fuel is described both as material and oil as opposed to simply moisture (*ruṭūbat*), this final term being the one most typically encountered in discussions elsewhere in the text. In English moisture gives a sense of a watery wetness, but the use of material (*māddah*) brings more substance to it. And in this manner, it moves closer to the kind of liquid which is so often referred to in the CS. The watery element seen there is forever unctuous, an oily liquid. This deepening of our understanding of this vital substance might suggest an answer to the question of why food is necessary to replenishing it while water is insufficient.

Additionally, the lamp is a good place for us to begin to consider the problem of putrefaction, especially given that preventing that corruption was previously mentioned as being on par with the importance of preventing the loss of the moisture. Failure to accomplish either of these aims results in harm. The disturbance caused by the deterioration of the innate moisture is said to impact its ability to maintain life and to

differ from other kinds of injuries to the body. What the putrefaction is said to be doing is to be deleteriously changing the quality of the body's moisture. Its action is further described in this way: *'ufūnat kā qā'ida hai kih pahle ruṭūbat ko fāsid kartī hai ba'd us ke mutaḥallul kartī hai. aur ek shai k̲h̲ushk k̲h̲ākistarī ko ba'd taḥallul ke choṛ detī hai*.[584] In other words: The usual course of the putridness is that it first corrupts the moisture and afterwards decomposes it; and after the disintegration, it leaves behind a dry, ashy thing. Thus, in the long run, quantity is affected in addition to quality. In this sense, avoiding putrefaction also comes under the heading of preserving moisture. Cold might be the final mark of death, as when a wick no longer bears a flame, but moisture is feeding the flame. Putrefaction, though, in that what it leaves behind is "dry and ashy" (*k̲h̲ushk k̲h̲ākistarī*) appears to be working like an excess of heat: a fire fighting against the fire of health, competing for the use of the fuel of life—akin to the effect of the burning words of Iqbal in *Shikva* which leave behind something ashy in his mouth.

Since food is used to replenish moisture, it could be used to deal with the after effects of putrefaction, but how does one avoid the problem in the first place? Some indication might be given in this advice on how to reach a natural death:

> *pas ṣinā'at ḥifẓ-i ṣeḥḥat kī vahī he jo badan insān ko bah tan-durustī isī ḥadd-i mu'aiyan tak aur us sinn tak jis kā ajal-i ṭab'ī nam hai pahoṉcā de aur jo cīzīṉ munāsib us jism kī ṣeḥḥat ke haiṉ in kī muḥāfaẓat kare is muḥāfaẓat kī ẓāmin aur mudabbir do quvvatīn haiṉ kih ṭabī'at un kī k̲h̲ādim taṣavvur kī jātī hai*.[585]
>
> So this is the craft of hygiene: that which gives the human body much vigor until its appointed limit and until it reaches that period which is called the natural hour of death, and also it is those things which are proper for protecting the health of

[584] Ibid.
[585] Ibid., 197.

> the body. Two faculties are the surety for this protection and for managing [those things which are proper] so that the temperament is considered but a servant of them.

The nutritive faculty has already been implied with the intake of food. The second faculty mentioned here is the vital one (*ḥaivānī*).[586] If the temperament is the servant of the faculties, then the faculties become the servants of the physician in that these are the forces he can leverage to serve the ultimate purpose of health. This has implications for approaches to treatment and particularly for approaching death. If one sees the power to heal as a leveraging the body's own resources, as a patient weakens and nears death the available force would dwindle. In such a case, a physician might continue to treat a weakened, mortally ill patient, but dramatic results would not be expected. It would be like trying to lift a heavy rock with a thin stick.

The technique of using the body to leverage its own health can be seen in this statement about restoring and preserving health which begins with a plan for the former:

> *pahlī tadbīr kā tamām honā bah nisbat un logoṉ ke k̲h̲ayāl kiyā jātā hai jo ak̲s̲ar laz̲z̲āt ko tark karīṉ aur pā-bandī aur iltizām un ke mizāj meṉ ziyādah ho aur zamānah darāz tak ṣabr kar sakīṉ tā-ain kih rafta-rafta un kā mizāj ba-ṭaraf e'tidāl ke rujū' kare is-liye kih agar un kī tadbīr bilā-tadrīj kī jāe ak̲s̲ar amrāẓ paidā hoṉ gī dūsrī tadbīr isī g̲h̲iz̲ā se mumkin hai jo mushābah un ke mizāj hotā kih in kī ṣeḥḥat maujūd ba-ḥāl k̲h̲ud bāqī rahe*.[587]
>
> The entire first course of action is considered in reference to those people who generally concern themselves with pleasures and of whom there would be more in their temperament which is fettered and necessary to take care of, and its completion is possible by having patience for a long time until gradually their temperament would return towards its equilibrium since, if the course of action for them would not be gradual, usually illnesses would arise. The second plan of

[586] Ibid.
[587] Ibid., 234.

> action is possible by way of using food which is akin to their temperament so that existing health remains in its usual state.

The concept of putting the body in an appropriate setting so that it can self-correct is illustrated here. An instantaneous change is not aimed for, rather a slow dispersal of what is causing the problem is seen as the solution for intemperament. (Note other types of more traditional diseases will be discussed further on.) The reason given for doing so is that maneuvers which would rapidly change the body's microclimate, so to speak, are likely to have undesired negative consequences; they potentially can go too far, beyond the mark. This would create an imbalance in another direction which would then need to be remedied, setting up a ping-pong effect. Notice that giving up is set in juxtaposition to providing. Food is what is conscientiously maintained for those who are healthy, but for those who are used to indulging in pleasures, a withholding of the indulgence is implied. Therefore, in the state of ill health something needs to be subtracted from the body, an excess eliminated, while in the state of health something needs to be provided, or really continue to be provided. In other words, an addition is made. The body begins to look a bit like a mathematical statement. But let us nuance this statement a bit.

> A temperament, or *mizāj*, is said to be
>
> *ek naī kaifīyat he jo kaifīyat mutaẓāddah ke āpas meṉ fe'l o infe'āl se paidā hotī hai […] az aṉjā kih avvalī quvvatīṉ arkān arba'ah maẓkūr kī ḥarārat o barūdat o yubūsat o ruṭūbat haiṉ us se ṣāf ẓāhir hai kih mizāj un ajsām kā jo un arkān se nabīn majmū'a unhīṉ kaifīyat kā ho gā*.[588]
>
> a new quality which arises from opposite qualities mutually as with an action and a reaction […] In as much as the chief forces are the aforementioned four fundamental elements of heat, coldness, dryness, and moisture, then from this it is clear that the temperament of those bodies which comes from those elements will be a new sum/fresh aggregate of them.

[588] Ibid., 13.

In other words, a temperament is how the qualities above combine, i.e., the tendency of a particular person in relation to these at a given point in life. Temperaments are then broken into two overarching categories. The first is said to be when the amount of the four qualities would be equal (*miqdār kaifīyat arba'ah kī barābar ho*.[589]) This is the true mean and is the point illustrated in Figure 4 at the dead center of the diagram where the *x* and *y* axes meet. It is the point where there is not too much moisture or too little, while at the same time the temperature is also not in excess or lack. This was the temperament rarely, if ever, achieved in exactitude but which humans can come close too. The second type, not surprisingly, is described as *not* having the four qualities equal: *k̲h̲vāh ruṭūbat o yubūsat me̲n̲ se ko'ī kaifīyat g̲h̲ālib ho k̲h̲vāh ḥarārat o barūdat me̲n̲ ek kaifīyat zā'id ho gī*.[590] Or: Some quality would predominate, whether moisture or dryness; one quality would be in excess whether in respect to heat or cold. In other words, this is where there is not a balanced state among the two pairs of opposites. This division, then, breaks temperaments into the mean and everything that is not the mean. The first of these is called an equable (*mo'tadil*) temperament and the rest are unequable (*g̲h̲air mo'tadil*) temperaments.[591] The first of these is less important both because, as we have seen above, it is rare and because a perfect state of equability is less pressing medically. The non-mean temperaments being a diverse group are further defined and divided. Since what is being examined is relative proportions of two basic qualities, this can be further described as eight basic temperaments. The first four Ibn Sina calls simple, and they are illustrated below.

589 Ibid.
590 Ibid.
591 Ibid., 11.

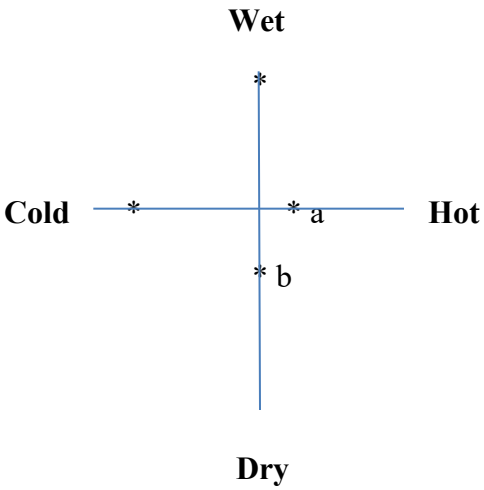

Figure 5: Simple Unequable Temperaments

The four stars each show a type of simple, unequable temperament. One temperament is too hot in relation to the center point, but neither too wet nor too dry (point a). We can see this because it still sits right on the *x* axis while being closer to hot than cold on the *y*. Below it is a star on the *y* axis which is balanced in relation to temperature: it is neither too hot nor too cold, sitting at the mid-point between those extremes (point b). However, it is drier than ideal. In each case, these express only an excess or lack of one of the two quality gradients. Note that in each case, these just show an example of a type of temperament. So even though this example shows a specific degree of being too hot, any temperament with any degree of being too hot while being balanced in regard to moisture would fall under this category. In other words, any asterisk falling right on the *x* axis to the right-hand side of the *y* axis belongs in a single temperamental category. The "compound" type of temperament is seen when the temperament deviates from the norm in relation to both gradients at once, whether by excess or lack. This is illustrated in figure 6.

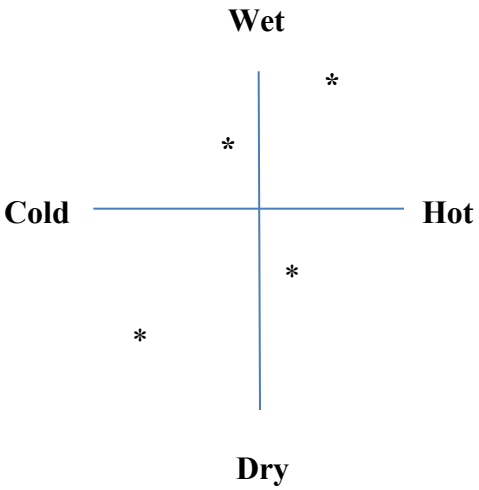

Figure 6: Compound Unequable Temperaments

As with the simple temperaments, each of these points is only representative of an entire category. What differs here is that each point is off center according to both the *x* and the *y* gradient. One gradient may represent an excess for one quality, while for the other there is a lack. For example, in the lower right-hand quadrant, the temperament which is illustrated has an excess of heat, being closer to the "hot" end of the spectrum. At the same time, it expresses a lack of moisture in being closer to the dry end of the spectrum than the wet end.

What makes the medicine complex is that these 8 categories of temperaments represent humans who can fall, in the first set of 4, anywhere along an axis, and in the second set anywhere within a quadrant. Like snowflakes, no two temperaments are exactly alike though individuals in each category share general characteristics. Furthermore, we know from the discussion on aging above, that in spite of any general

temperamental tendencies, a person shifts in the general direction of downward and leftward over the course of a lifetime.

This brings to mind al-Khwārizmī. This mathematician was born near the city of Bukhara some 200 years before Ibn Sina. Al-Khwārizmī had an interest in *jabr,* a term which has it home in the Arabic language, but in Urdu still carries the relevant meanings. The *Oxford Urdu-English Dictionary* gives four meanings: the first being "compulsion" or "constraint"; the second being an "inescapable decree of fate"; the third "recompensation, improvement; bringing back to normal"; and the fourth "restoring to sound health; setting a bone."[592] Why this range of definition matters is it captures the sense of this literally restorative medicine, where loss is compensated for via addition and excess whittled away. The medicine in Q brings one back to normal by recompense, something is added when and where needed. But there is also a sense that the body, when not improperly treated, is under a certain constraint or compulsion which sends it back in the direction of equilibrium. Healing is a natural process; the body has a tendency towards health. Al-Khwārizmī, of course, was applying his thoughts to linear and quadratic equations rather than bones. He solved those problems by subtracting from one side of an equation to make the two sides equable. This brings us back to an important point to consider in Ibn Sina's description of medicine. He states:

> *yeh bhi jānnā cāhiye kih lafaẓ moʻtadil jis aṭibbā apne fan meṉ istemāl karte haiṉ vah mushtaqq taʻādil se nahīṉ hai jis ke maʻnī ham-vazn aur barābar hone ke haiṉ balke moʻtadil mushtaqq hai ʻadl fī al-qismat se bāiṉ maʻne kih vah murakkab jise aṭibbā moʻtadil kahte haiṉ khvāh tamām badan farẓ kiyā jāe yā*

[592] Oxford Urdu-English Dictionary, 413.

> *ʻaẓv maḵẖṣūṣ us ko ʻanāṣir kī kaifiyāt aur kammiyāt aisā pūrā ḥiṣṣah milā hai jo nihāyat munāsib badan insānī ke hai*.[593]
>
> You should also know this: that the word equable (*moʻtadil*) which physicians use in their craft is not derived from balance (*taʻādil*), meaning of equal weight and uniform, rather equable derives from equity *(ʻadl*), clearly meaning equity with respect to distribution; that is, meaning that which is combined, which the physicians call equable, whether the whole body is assumed or a particular member, the qualities and quantities of the primary elements are found mixed together in that entire part which is extremely befitting for human bodies

Perhaps in mathematical terms what that would mean is the body will not look like 5 = 5 or 10 = 10, or even 5+5 = 5+5, though perhaps it might look like 2+3 = 4+1 or 7+3 = 2+8. That is, unlike parts add together to give the body a kind of overall balance rather than the body being one homogenous unit with equal units equated. This statement appears in the context of a discussion of organs. Of the vital organs, the heart is the hottest whereas the brain, another vital organ, is among the coldest parts of the body.[594] These relative, potential excesses work together to strike an overall balance. The heart does not need to be cooled down to function properly and preserve life nor the brain be warmed up. The author does make the point, though, that life tends more in the direction of heat and moisture than the other way around. He goes so far as to say: *ḥayāt ba-jihat ḥarārat ke aur nashvonumā ba-vajh ruṭūbat ke hai balke ḥarārat ruṭūbat se qivām pātī hai*.[595] That is: Life exists because of heat, and growth exists because of moisture; moreover, heat depends on moisture. Growth is not a particular concern of ours, but the preservation of life and health is. What is involved in reaching one's full span?

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[593] Kantori, 14.
[594] Ibid., 19.
[595] Ibid., 15.

For adults the recommendation is the regulation of exercise, food, and sleep.[596] Food has already been mentioned as the primary way to shift and or maintain heat and moisture at desired levels in the body, and moderation has been mentioned as well. Therefore, it is no surprise to be told that hunger matters. The author states: *jo shaḵẖṣ ārzū-mand apnī ṣeḥḥat kā yaqīnaṉ ho cāhiye kih hai be-ishtehā-i ṣādaiq ke kuch nah khāe aur jab tak us kā me'dah aur ūpar kī āntīṉ ġẖizāe avval se ḵẖālī na-ho jāīṉ is-liye kih bahut muẓirr ba-ḥāl badan yahī hai*.[597] Or: Anyone really intent on his own health should not eat anything without true hunger and not before his stomach and upper intestines are first empty since that would be very deleterious to the body's state of health. Excess is unhealthy because it can push one away from a balanced state; if you are poised at just right, anything added would necessarily nudge you from that equipoise. However, what may be surprising to some is the type of diet recommended. For example, we are told: *jo shaḵẖṣ apnī hifẓ ṣeḥḥat kā ṭālib hai kih use vājib hai kih us bāt meṉ koshish kare us kī ġẖizā ko'ī shai ġẖizāe davā'ī se na-ho jese tarkārī aur favākih vaġẖaira*.[598] In other words: It is necessary for whomever is seeking health to not go for some food such as medicinal foods like vegetables and fruits, etc. One might think that this just means some fruits and vegetables are considered medicinal, not all. However, the recommended items for a daily diet omit mention of either of these, rather it is said to include meat, wheat, a sweet dish, and wine. Of course, a sweet dish could possibly, though not necessarily, be fruit-based. Beyond these staples, Ibn Sina states that any other

[596] Ibid., 207.
[597] Ibid., 214-15.
[598] Ibid., 214.

kinds of food and drink should not be used except by way of remedy or as part of a maintenance plan [to preserve health] : *us ke sivā aur ko'ī cīz khāne aur pīne meṉ istemāl nah karnī cāhiye magar bar sabīl 'ilāj yā tadbir bi-al-hafẓ ke*.[599] Anecdotally, while living in the household of a hakim in India, the diet above, minus the wine, was *de rigueur*.

As for the importance of exercise, its benefits include elimination of waste and increasing inner heat. The body is said not to be able to evacuate all the waste left after normal digestion, so exercise acts as another avenue for removal. Given that exercise is defined as intentional movement which has the aim of requiring uninterrupted, deep breathing (*ḥarakat irāda hai jo tannaffus 'aẕīm aur mutavātir kī ṭaraf shaḵhṣ insānī ko muẕṭarr kartī hai*), we can understand the avenue of removal as the breath.[600] This also explains why heat is built up by exercise given that breath, which draws in heat, is quickened. The author states: *us ḥarakat ke jo rūḥ gharīzī ko kih ālah-i ḥayāt har 'aẓv kā vahī hai ba-ṭaraf a'ẓā ke khancne-valī hai*.[601] That is: That movement is what pulls the innate vital breath towards the organs, that breath being the instrument of life for every single organ. Movement, then is seen as a way to draw in vitality and to nourish life as well as a way to expel the superfluous. Again, notice that life appears able to be compartmentalized. There is the overall life of the body, but a life of the organs as well. There is even said to be a different exercise for each organ.[602] This praise of the benefits

[599] Ibid.
[600] Ibid., 207.
[601] Ibid., 208.
[602] Ibid., 209.

of deep respiration is qualified elsewhere by the suggestion that its benefits can only be reaped when the exercise happens in clean, pure air: *us kā fe'l yeh hai kih hamāre badan main ṣeḥḥat paidā kartī hai aur hamārī ṣeḥḥat badanī kī ḥifāẓat kartī hai*.[603] Meaning: Only then, by means of such air is health produced in our bodies and our corporeal health preserved. As with food, there are good types and bad types, and issues with both excess and lack. Good food *and* good breath are needed for good health. The text goes so far as to say in regard to those whose diet is appropriate: *aur jis shaḵẖṣ ko taufīq istemāl riyāẓat kī bar vajh e'tidāl apne vaqt ḵẖāṣṣ meṉ ho us shaḵẖṣ ko har ek 'ilāj se be parvā'ī ḥāṣl hotī hai ya'ne jis 'ilāj kī ḵẖvāhish amrāẓ-i māddī aur amrāẓ-i mizāj ko tabe'amrāẓ-i māddī ke hotī haiṉ*.[604] In other words: Whoever has the ability to do moderate exercise at his own particular time stands in no need whatsoever of obtaining medicine, meaning such remedies as are required for humoral illnesses and disorders of temperament attendant on humoral illnesses. This is of especial importance as drugs are never a free-ride. Ibn Sina refers back to a statement by Hippocrates, recapitulating it thus:

> *davā-i mushil jis ṭarḥ tanquiya mavādd kā kartī hai isī ṭarḥ aẓīyat detī hai aur bā-ain-hamah jis ṭarḥ mavādd-i fāsid kā istifrāgẖ hotā hai isī ṭarḥ ḵẖilṭ-i fāẓil ya'ne acchī ḵẖilṭ aur ruṭūbāt gẖarīzī aur rūḥ vah rūḥ kih jo jo har ḥayāt hai us se bhī ek miqdār ṣāleḥ nikal jātī hai aur yeh sab bātīṉ quvvat a'ẓāe ra'īsah aur ḵẖādimah ko ẓa'īf kar detī haiṉ pas yeh umūr aur un ke sivā aur bhi maẓarratīṉ imtilā kī haiṉ jo ba-ḥāl ḵẖud matrūk ho jātī haiṉ*.[605]
>
> A purgative drug which clears out humors injures in this very way, for with all this pouring forth of corrupt humors is an excess [purging] of humors; that is, good humors and innate moisture and vital breaths—those vital breaths, every one of which is life—also from that [purging] an amount of the good escapes, and all

[603] Ibid., 108.
[604] Ibid., 207.
[605] Ibid., 208.

> these things weaken the power of the principle and subsidiary organs; so there are these concerns, but, on the other hand, there is also harm from the surfeit if it is left to itself in this state.

The accumulation of the wastes is what cause bodily imbalances, but drugs remove one problem while causing others. The waste is taken care of, but essential elements are also removed, plus the organs are taxed. In so far as organs hold life, loss of their strength means a reduction of one's vitality, a ding to the carriage of one's lifespan. The wearing away of a component means the wearing away of life. Breath therefore offers a way to reduce the buildup of waste in the body without these drawbacks. Thus, two systems for leveraging health exist, the digestive and respiratory—though with the caution that respiratory did not carry the meaning that it does now of circulating blood bringing oxygen to cells in need. Movement does not cause an increase in breath because the body needs oxygen, rather it rings more passive, as though it makes room for the breath to rush in like pulling a plunger out of water allows the liquid to rush down the drain. So here it will be instructive to look more closely at vital breath/pneuma.

Pneuma is described as a physical substance with its source of production being the heart. This has to do with its formation: *buk̲h̲ārīt ak̲h̲lāṭ aur in kī laṭāfat se paidā'ish us cīz kī hotī hai jis kā jo har laṭīf hai aur vah rūḥ hai*. So: From subtle, vapory humors, a thing which is entirely light is produced. That thing would be the vital breath, and these rarified portions of the humors are found in the heart.[606] The humors in turn, as with every physical substance, are formed out of the four fundamental elements: air, fire, earth, and water. Because these elements have a relationship with the traits of moisture and temperature, they can be plotted on the *x*-*y* axes, just as humors which bear resemblance to them. The humors form from these non-reduceable elements, but are not simply the element they bear the most resemblance to.

[606] Ibid., 93.

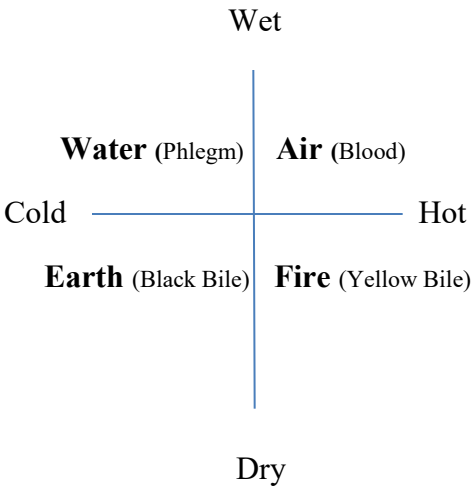

Figure 7: Fundamental Elements

This diagram is helpful because it also places the heavy and light elements in relation to each other and therefore shows us where pneuma would be located even though it is not a humor but rather composed of humors. Air and fire are described as light, and water and earth as heavy.[607] Pneuma is said to be formed of light elements, so would be described by the two right-hand quadrants. The *nafs* or soul is distinguished from *rūh* or pneuma here and (after Aristotle) is called the prime mover (muḥarrik-i avval), but its physicality or lack thereof is not directly discussed.[608] For Aristotle the prime mover is an unmoved mover, a center point which draws all toward it. It inspires movement from a state of equipoise. It would be tempting to place the *nafs*, then, at the center of this diagram where the *x* and *y* axes meet and attribute to it the body's seeming ability, when undisturbed, to gravitate toward a state of health. However, I do not think there is enough overt evidence for doing so. Furthermore, the soul may be the place where Ibn Sina draws the line and says this is no longer the realm of medicine, for he often marks off

[607] Ibid., 12.
[608] Ibid., 13. Though *nafs* and *rūh* share meanings in Urdu such as soul, spirit, and breath of life, they are not used by this text as synonyms. *Rūh* is the more worldly in this context.

what is beyond the bounds of medicine and which lies rather in the realm of philosophy. He then typically indicates that the confirmation or discussion of such a concept is not a task for physicians. We see this, for example, in his discussion of the three, or perhaps two, basic human faculties.

Ibn Sina breaks down the thoughts of philosophers versus the thoughts of physicians when talking about the basic faculties. The link between the vital breath and faculties he puts in Aristotle's mouth. The latter is to have said: *rūḥ ba-vajh quvvat-i jīvanī ke mabdā-i avval aur nafs-i aula ko qabūl kartī hai vah nafs jis se quvvatīn̲ bar-angek̲h̲ta hotī hain̲*.[609] In other words: In a way, the vital breath accepts the initial source of the life force from the primary soul, that soul by which the faculties are roused. A specific number of faculties is not specified in this statement, but in the general discussion three are initially proposed, the psychic, the physical, and the vital. The psychic is the perceptive faculty, and the physical encompasses nutritive and reproductive functions. The vital faculty, even though being created by a conjunction of soul and vital breath, is said to work thus: *quvvat jīvan ya'ne vah quvvat jo amr-i rūḥ kī tadbīr kartī hai*.[610] That is: The vital faculty is the faculty which provides for the command of the vital breath. So, though the pneuma meeting the soul allows the faculties to come into being, the vital faculty then controls the pneuma. Furthermore, it gives the pneuma the ability to impart life.[611]

Though Ibn Sina presents arguments that variously combine the faculties into two overarching or three separate faculties, ultimately, he agrees with Aristotle that the source of all these faculties is the heart. Yet, he adds that it is a philosopher's role to verify this,

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609 Ibid., 95.
610 Ibid., 89.
611 Ibid.

not a physician's; a physician is meant to take this for granted.[612] Nevertheless, we are left with the *nafs* and the vital breath in close association in the heart. We are also left with two faculties that matter most for medicine and lifespan, the vital faculty as we have been discussing it and the nutritive part of the physical faculty which regulates moisture. That faculty has the crucial role of keeping the body well supplied with the liquid fuel, but not oversupplied, as an excess could douse the flame of life. Then there is the vital faculty which regulates the body's temperature by means of the vital breath, mainly keeping it warm enough, but again without overdoing it. Then, given each of these faculties' primary area of control, they could be tentatively added to our axes of life as follows in Figure 8:

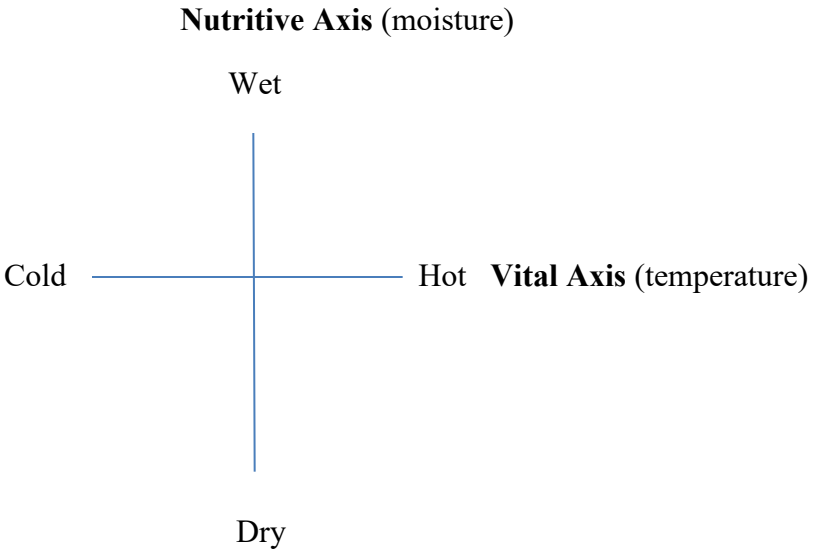

Figure 8: Faculties as related to Qualities

Consequently, now this illustration does not merely represent human physiology and the factors leading to an inevitable, natural death, but it describes the main routes of medical

[612] Ibid.

leverage for restoring health by means of restoring balance with each axis as a possible lever. The third faculty of consciousness could be seen as a *z* axis rising up from the page in the manner pondered previously for visualizing the three humors of Ayurveda. However, its importance is limited in medicine because it does not represent a faculty which is generally manipulated for preserving and maintaining health. One could argue that it was implied in the proper regime for adults given above where three means were mentioned: diet, exercise, and sleep. Diet is obviously linked to the nutritive axis; it is how moisture is managed. Exercise is linked to the vital axis and the manipulation of temperature via breath. And, in support of such an idea, one might point to the fact that moderate sleep is said to allow the psychic faculty to attain repose: *quvvat nafsānī ko rāḥat pahunctī hai*.[613] However, this impacts the body in a primarily passive way. The benefits of it come from what it allows the other two faculties to accomplish in the way of digestion and preserving the vital breath—the two means illustrated in Figure 8.[614] The end result of sleep is described in terms of the two qualities tied to those two faculties as seen on the *x* and *y* axes above: *naum-i mo'tadil bar-vaqt e'tidāl a̲kh̲lāṭ ke miqdār aur kaifīyat me̲n ruṭūbat aur ḥarārat bedār kartī hai*.[615] That is: Moderate sleep, when the quantity and quality of the humors is well balanced, stimulates moisture and heat A third quality being effected on a psychic axis is not mentioned and does not appear to be envisioned. (This is also supported by the discussion of whether there are even actually three faculties or just two faculties with the third as a sub-faculty under the control of another.)

613 Ibid., 224.
614 Ibid.
615 Ibid.

Because sleep is said to be warming and moistening, it is said to be especially important for the elderly. This should be evident from figure 4 above. If absolute cold and absolute dry mark natural death, and if aging is the process of moving towards those, then anything that pushes one in the opposite direction, represents a staving off of death, i.e. anything which adds warmth and moisture. This may help to explain why summer is the season when old people are stronger; it is the warmest time of year.[616] And, in fact, the regime given for those over the age of 60 is to use things from which they would immediately get moisturizing, heating, and increased sleep. (*tadbīr un logoṉ kī istemāl us cīz kā hai jis se tarṭīb aur tasḵẖīn sāth hī ḥāsil ho aur nīnd kā baṛhānā*.[617]) In addition to increased bed rest, smaller more frequent meals are also recommended.

Regime is not all that changes with age, treatment recommendations also differ from those in the adult period, that is, for those whom we would call middle-aged, and also for the elderly. Bleeding and cupping are to be avoided for the elderly.[618] Plus, the author calls the claim that cupping on the top of the head delays senility misguided. He states that for some bodies benefit is manifested and for some it is not, writing: *ba'ẓ abdān meṉ yeh fā'idah ẓāhir hotā hai aur ba'ẓ meṉ nahīṉ hai balke abdān is ḥajāmat kī vajhah se shaib bahut jald paidā hotā hai*—i.e, rather, in those bodies, because of this cupping, old age arises very quickly.[619] Thus, at times, this treatment can actually cause the problem it was seeking to alleviate. And for this reason Ibn Sina objects to using it with the elderly at all, saying medicine is not a game of dice.[620] For him this represents an unjustifiable risk. Purging is preferable to bleeding in the elderly, but even that does not

[616] Ibid., 118.
[617] Ibid., 232.
[618] See Kantori, 276.
[619] Kantori, 275.
[620] Ibid.

come without risk. The risk is the same as for those with weak intestines who generally experience severe loosening from purgative medicines, such that the checking of it takes a great deal of time and only after very many treatments does the diarrhea stop. (*jis ke amʿā ẓaʿīf hoṉ akṣar davāe mushil se aisā ishāl shadīd us ko ʿāriẓ hotā hai kih us ke band karne meṉ nihāyat vaqt hotī hai aur bahut se ʿilāj ke baʿd us ke dast band hote haiṉ*.[621]) Exercise, on the other hand, which we have seen used above for increasing heat, is not given a blanket recommendation or prohibition. Rather we are told that the recommendation for or against it this varies between individuals.[622] Finally, old age is also where the wear and tear of old habits may show up. For example, the harm caused by drinking ice water is said to show up any time from immediately after drinking it up until old age.[623] If life is heat, ice would drive one in the direction of death.

As with season, the climate of where one lives, tending to fall somewhere on the gradients of moisture and temperature other than a perfect balance for humans, impacts health. For example, hot climates are associated with early senility.[624] Places which are cold and/or of high altitude, on the other hand, are said to have healthy people who have excellent digestion and long life. (*haẓm-i jaiyid hotā hai aur ʿumr ṭavīl hotī hai*.[625]) Seasons and climates impact the physician in that they produce different disease. He is given the advice to know these to such an extent as to save bodies from harm and to form a well-thought out precautionary plan. (*tākeh abadān ko maẓarrat se bacāne kī ṭaraf aur tadbīr ḥifẓ-i mā taqaddum kī ba-ḵẖūbī kare*.[626]) This, then, leads us away from considerations of lifespan and on to the topic of what might steal away that span, i.e.

[621] Ibid., 256.
[622] Ibid., 233.
[623] Ibid., 221.
[624] Ibid., 124.
[625] Ibid., 125.
[626] Ibid., 113.

illnesses and how illnesses might be recognized. What categories and indications are seen, and how do these give us to understand medical approaches aimed at the dying?

SIGNS AND SYMPTOMS: INDICATIONS OF DISEASE AND DEATH

Though Galen argues for three states for human bodies, including health, disease, and a neither of the above, the latter of which includes the elderly, Ibn Sina argues for just two states.[627] These amount to health and decline of health.[628] He makes this argument right at the start of the treatise when he is laying out the definition of medicine. Later, though, when discussing diseases, causes, and symptoms, he gives six stages of health without attributing the division to another philosopher or physician and without a statement of disagreement or qualification. Thus, we can understand this as an alternative manner of classification. He describes each as follows:

> *ek martabah yeh hai kih badan nihāyat darajah ṣeḥḥat par ho dūsrā martabah yeh hai kih muntahāe darajah ṣeḥḥat se kam ho tīsrā martabah yeh hai kih badan nah ṣeḥḥat ho aur nah marīẓ jaisā kih ḥālat sālisah ke bayan meṉ guzarā cauthā martabah yeh hai kih badan ghair ṣeḥḥat qābil maraẓ kā jald ho pāncvān martabah yeh hai kih badan marīẓ-mand ke bīmār ho chaṭī martabah yeh hai kih nihāyat darajah maraẓ par ho*.[629]
>
> The first grade is where the body has the utmost degree of health; the second grade where there is less than the peak of health; the third grade where the body is neither healthy nor sick, as explained previously; the fourth grade where the body is without health and very susceptible to disease; the fifth grade where the body is afflicted with illness; the sixth grade is where there is the utmost degree of illness.

This six-way versus two-way division might represent a theoretical construct versus a practical one, for in the first case what is being delineated are possible states, *ḥālāt*, while in the second the framing is of grades or stages, *marātib.* This shifts the focus to degrees of decline. Thus, one could image a gradient of health with perfect health the starting

[627] Ibid., 98.
[628] Ibid., 9.
[629] Ibid., 104-105.

point, and all else the decline (so consistent with two states), but with convenient points being marked off to distinguish various levels of severity. Whatever the case may be, the author states that diseases are either conceding or non-conceding. (*maraẓ hai yā musallam yā hai yā ghair musallam.*[630]) But he does not associate this amenability in regard to treatment to disease categories necessarily, rather he states: *musallam vah maraẓ hai kih jis ke mo'alaja kā ko'ī mane' aur 'ā'iq jaisa cāhiye na-ho. aur ghair musallam vah hai kih us ke ham-rāh mo'alaja kā ek 'ā'īq bhī maujūd ho kih us ke mo'alaja meṉ tadbīr ṣā'ib kī rukhṣat mande.*[631] As translated: A conceding illness is one in which there is no impediment or barrier to the desired treatment. And a non-conceding is that in which, along with a treatment [being available], there is also an obstacle present so that in respect to treatment the action will not hit the mark. The word "impediment" leaves open a range of factors which could interfere with treatment as related to disease type, patient type, or availability or safety of appropriate medicines. An example could be drawn from what was seen above about bleeding being contraindicated for those over 60. If that person had an illness for which the only correct treatment were bleeding, an impediment to treatment would exist. Treatment includes under its umbrella medicine, regime, including diet, and manual operations (*dast-kār*), such as venesection or massage.[632]

However, just because something is not readily treatable does not mean that the physician will not attempt to work with it. For example, in the case of ulcers, food needs to be stopped in order to remedy some aspects of the problem and to be continued in order to remedy others. It, therefore, has an unresolvable contradiction, an impediment.

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630 Ibid., 105.
631 Ibid. *Musallam* is difficult to translate here. Secure and non-secure is another possible way of describing them, but the context makes me lean more toward conceding and non-conceding.
632 Ibid., 242.

Still, the physician is not advised to abandoned such a patient, rather he is told to: *ba-k̲h̲ūbī g̲h̲aur aur fikr kartā rahe*; that is, to duly and repeatedly consider and reflect upon this situation.[633] Factors which might play a role in deciding on a course of action include patient strength, temperament, symptoms, physique, age, season, other climatic conditions (including things like altitude), repletion or depletion, and occupation.[634]

Time is another factor that can affect treatment decisions. For one thing, there is a right time and a wrong time to treat. As we have seen above, diseases have a trajectory—a sort of natural lifespan—and most are described as having four stages: *ibtedā, tazīd, intihā, *agh̲t̤āt̤*.[635] This simply means a beginning, increase, peak, and decline. What is to be done or not done may be tied to where the disease is on its path. This advice, for instance, is given to physicians: *phir bhī us kā k̲h̲ayāl rahe kih ba-roz ḥarakat-i maraẓ ke faṣd aur istifrāg̲h̲ nah karnā cāhiye is-liye kih vah roz rāḥat o āram kā hai aur us din sonā mufīd hotā hai aur us din maraẓ kā s̲aurān aur g̲h̲alabah hotā hai*.[636] In other words: Nevertheless, keep in mind that one does not want to bleed or cause vomiting on a day the illness is active since that is a day for peace and quiet, and on that day sleep is beneficial, and it [the illness] is seething and has the upper hand. Sleep is one of the items we saw comes under regime, but the difference here appears to be that sleep will naturally occur on such a day; it need not be prescribed or induced. In this regard, it is not a treatment. Furthermore, the statement about the disease being active carries the implication that diseases are harder to treat during that period, as if an army is mobilized

[633] Ibid., 283.
[634] Ibid., 248.
[635] Ibid., 103. The final word of these four appears twice in this section, and both times the beginning of the word is somewhat illegible. This is my best guess, but is likely incorrect as it does not appear to be an actual word. However, I have not been able to figure out what the correct word might be. I am drawing the meaning from the context.
[636] Ibid., 264.

which would make the efforts of any counterforce futile, but which on another day could have a substantial impact. This brings out another aspect of the use of time, waiting. Whether an injury is mild or an illness puzzling, the advice is to wait. We are told in regard to the latter situation: *agar maraẓ ke pahcānne meṉ ishkāl ho ṭabī'at par choṛ denā cāhiye aur 'ilāj meṉ 'ajalat nah karnī cāhiye. pas ġhālib ṭabī'at yā maraẓ par ā'e gā yā maraẓ ba-ḵẖūbī ẓāhir ho gā.*[637] That is: If there would be difficulty in identifying the illness, then one should leave the constitution be and not make haste with a cure. Subsequentially, either the constitution will prevail or the illness will become truly apparent. There is strategy to the business of healing. A malady revealing itself rings of flushing out a foe or waiting for his error. But what else is contained in this advice is, once again, the intimation that the body has an ability to heal itself and that, at times, that self-correcting is the very best of options. However, also frequently accompanying such a suggestion about waiting or advice against a contraindicated action is an assertion along these lines: *phir bhī agar ẓarūrat du-bārah nishtar lagāne kī ho...*[638] Meaning: Nevertheless, if there were an exigency to apply the lance a second time… In other words, if the situation is dire, even a contraindicated action can be attempted, and, if the situation is dire, waiting may not be the wise move. So, we do get statements like this in which urgency overturns normal treatment recommendations while, on the other hand, we find an absence of statements about some stage or grade of disease being too severe or too close to death to attempt treatment.

In this medicine certain things are presented as givens which a physician just has to accept, including faculties, humors, and temperaments. Perhaps most important among what has to be accepted is causality. A physician needs to accept that a particular cause is

[637] Ibid., 246.
[638] Ibid., 270.

required for the state of a thing, whether for stability and continuity or for any single change. (*har ek tag<u>h</u>īr hāl ko <u>k</u><u>h</u>vāh <u>s</u>abāt aur istimrar shai ko ba-hāl vāḥid ek sabab dar-kār hotā he*.[639]) This is a fundamental tenet of Unani medicine. However, other things are listed which are meant to be discussed, namely: diseases, their causes, symptoms, and the way to eliminate disease and protect health.[640] What this does *not* mean is that these things should be presumed to be dubious, but rather that they fall under the heading of medicine, and it is therefore a physician's duty to understand and advance knowledge of such. Disputation is a way to hone understanding. The working definitions provided for cause, disease, and symptom are as follows:

> *jo cīz pahle maujūd ho aur us ke maujūd hone se kisī hālat kā hālāt badan se maujūd honā yā kisī hālat par badn insān kā <u>s</u>ābit rahnā vājib ho jāe […] maraẓ ek hai'at <u>gh</u>air <u>ṭ</u>ab'ī hai badan me<u>n</u> insān ke jis kī jihat se bi'<u>zz</u>āt ko'ī āfat kisī fe'l me<u>n</u> vājib ho vujūb ulā kar ke aur yeh bāt yā mizāj <u>gh</u>air <u>ṭ</u>ab'ī se paidā hotī hai yā takīb <u>gh</u>air <u>ṭ</u>ab'ī se 'āriẓ hotī hai […] aur 'araẓ vah cīz hai jo us hai'at <u>gh</u>air <u>ṭ</u>ab'ī kā tābe' ho*.[641]
>
> [Cause] is that thing which is present first and from being present some state among [various] bodily states exists or a continuation of some state of the human body would be necessary […] illness is an unnatural state of the human body which directly necessitates some problem in relation to a certain operation as a primary consequence, and this matter either arises from an unnatural temperament or happens due to an unnatural mixture […] and symptom is that thing which would follow that unnatural state.

Disease, then, is seen primarily as an interruption of function. This makes life a process. Symptoms being seen as manifestations of a loss of function are grounded in the body; symptom has a physicality not always seen in the previous chapter. These manifestations of interrupted function may be externally visible or may be inferred to be occurring internally based on external evidence such as swelling. In regard to this triad of cause,

639 Ibid., 11.
640 Ibid.
641 Ibid., 98.

disease, and symptom, however, Ibn Sina also points out that the lines between them are not absolute: *kabhī ek hī cīz ba-qiyas apnī ẕāt ke aur bah naẓar ek cīz ke jo us se peshtar bhī ba-qiyas ek cīz jo us ke ba'd hoī sabab aur maraẓ aur 'araẓ hotī hai*.[642] In other words: Sometimes the very same thing—in respect to itself, and with a view also to the thing it was before, and in respect to the thing it became afterwards—is a cause, a disease and a symptom. An example given along these lines is that the pain of colic is called a symptom but able to cause syncope.[643]

Pain in and of itself can also be considered a malady, particularly when it is severe. Though severe pains are not always so troublesome. For instance, we are told: *ba'ẓ aqsām ke dard hotī haiṇ kih bā-vujūd shiddat vaja' 'ilāj un kā āsān hotā hai*.[644] That is: Some types of pain, although violent, are easy to cure. This recalls the division of diseases into those which were more amenable to treatment and those which were not. That division, echoed here, results in a focus on the workability of a situation rather than the type of entity being worked on, i.e. the specific disease type. Also, as stated previously, this division does not lead to a categorization of diseases or disease types which are not in any case to be treated. Supporting this is evidence that treatment was given to those known to be dying, for example as seen in a discussion on bloodletting. There fainting is being discussed and is generally of high concern, but certain conditions are listed where, if fainting happens, one should not be concerned. One of these is with patients who have enormous, fatal swellings, *am jo 'aẓīm aur mohlik*.[645] The reason for a lack of hesitation here may be that the patient would not survive without the bleeding, so

642 Ibid.
643 Ibid.
644 Ibid., 286
645 Ibid., 272. This appears to be a non-standard spelling for the word for tumor or swelling (expect ām).

the risk is seen as worth it, but, in any case, this gives a situation where a patient has a fatal condition but is nevertheless being treated.

APPROACHING DEATH

Is this example a case where death is imminent, or one in which it is on a distant horizon? What is the timeline of these fatal swelling? This is not information provided, but we do see descriptions of chronic-type diseases (*muzmin*) in the context of various discussions.[646] And once again, there is some indication that these are being treated. For example, a treatment of bleeding from a certain vessel on the back of the palm is said to be beneficial for chronic disorders of the diaphragm.[647] Interestingly, chronic diseases are also described as having a crisis. That is, they too have a trajectory, even if it is one which is extended. Ibn Sina states:

> *amrāẓ muzminah meṉ bhī taqlīl g̲hiẕā kī karte haiṉ magar bah nisbat amrāẓ hāddah ke bahut kam us vāsṭe ke tavajjoh hamārā ʻilāj meṉ amrāẓ muzminah kī ba-ṭaraf baqāe quvvat ke ziyādah hotā hai. us sabab se kih in kā boḥrān aur muntahā dūr hotā hai*.[648]
>
> In regard to chronic illnesses, there is still a reduction of food [prescribed], but in relation to acute illnesses, it is much less because our attention in respect to treatment in chronic illnesses is turned towards increasing the remaining strength. The reason for this is that their crisis and conclusion is far off.

This objective of protecting strength makes sense in relation to the discussion in the introduction of this dissertation on changing trajectories of death. In premodern times, the curve from point of illness to death was often precipitous. Even chronic diseases may have had a considerably lesser life expectancy than today because the general drag on the body would weaken it and leave it susceptible to other illnesses. A chronic disease could

646 For example, see Kantori, 243, 262, and 270.
647 Kantori, 270.
648 Ibid., 243.

be fatal not so much due to its own manifestation, but to the wear and tear on the body. Thus, it was of high importance to preserve strength, in so far as possible, for as long as possible.

Susceptibility to disease in general is said in the Q to be related to humors, either because they are in excess (*bharā*) or because they are present in an immature or raw form (*k̲h̲āmī*).[649] One's general strength and vitality, in so much as one possess them, has been described as an advantage, making it easier to successfully treat the individual. However, there is also a time when being healthy prior to illness leads to extra concern, namely when such a robust person gets sick in the winter. For, it is said that in this season, few healthy bodies get sick (*kam-tar ṣaḥīḥ abdān meṉ ko'ī maraẓ is faṣl meṉ paidā hotā hai*), so if they do so, there must be great danger (*āfat-i 'aẓīm*).[650] Obviously, it is a more serious situation when one gets sick at an unexpected time than an expected one. Furthermore, each season has diseases particularly associated with it; those are the expected illnesses. Spring, for instance, is said to be a bad time for chronic diseases. It is when congealed humors, having been set loose, move about; for that reason, in this season, the illness of those with the malady of melancholy is stirred up: *kih yeh faṣl ak̲h̲lāṭ bastah ko jārī kar ke us meṉ sailān kartī hai us vajhah se is faṣl meṉ jin ko maraẓ-i mālīk̲h̲ūliyā kā hai in kā maraẓ kā hayajān hotā hai.*[651] This moody stirring is captured by Eliot in these well-known lines: "April is the cruellest month, breeding / Lilacs out of dead land, mixing / memory and desire, stirring / Dull roots with spring rain."[652] And, as might be expected, in relation to such diseases, we are told that the turning of the seasons

[649] Ibid., 235.
[650] Ibid., 236.
[651] Ibid., 116.
[652] T. S. Eliot, "The Waste Land." In *The Norton Anthology of Poetry*, 773. This is how he spells cruellest.

provide relief for the illnesses of previous season.[653] This, then, is one thing which automatically imposes a trajectory on a disease. That would be, of course, if the opposite season exhibits the weather typical to it. For odd seasonal weather or certain combinations of seasonal weathers produce other characteristic diseases; for example, a hot summer followed by a dry autumn is said to result in small-pox (*judrī*).[654] Epidemics which are characterized as occurring mainly toward the end of summer are also attributed to conditions which span seasons. Ibn Sina states: *agar tag̲haiyur faṣūl kas̲īr kā tadāruk tag̲hīr kisī faṣl mūris̲ vabā kā kare*.[655] Meaning: If there is an infliction of corrupting changes for multiple seasons, the changes will produce an epidemic at some point. Generally, the direct cause of epidemics is attribute to putrefaction of the air, and, furthermore, that *sab se ziyādah jis havā me̲n ʻufūnat kī qābilīyat hai isī havā kā mizāj hai jo garm o tar ho*.[656] That is, that the capability for putrefaction of this air is greatest when its temperament is hot and moist. The importance of this is that what causes the air to be detrimental *and* what causes diseases in the human body expressed as a breakdown of function amounts to the same factors: the qualities of the gradients of moisture and temperature and where they fall in relation to the norm. Internally or externally, when the gradients are off-kilter, health is affected. This suffices to answer the question of why large groups of people get sick at the same time without the need of bringing in something such as the moral component seen in the CS.

This commonality of temperature and moisture as impacting health, whether originating internally or externally, also helps to answer the question of how preventative

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653 Kantori 105.

654 Ibid., 118. This is a subject will hear more about in the coming chapter.

655 Ibid., 114.

656 Ibid. See also 123. *Mizāj* could be translated as nature in this sentence, and might seem more natural, but I wanted to emphasize that this is the very same term used when talking about the internal qualities of the body.

medicine works. It is a treatment which is given before an illness appears which works by eliminating its cause; quite literally a counterbalance to the deleterious conditions before they appear. This can be done, in part, because season and weather conditions allow a physician to anticipate which diseases characteristic of that climatic situation will soon appear. At the same time, normal variations in climatic conditions do not have an identical impact on everyone because of the existence of temperaments, that is, because of different starting locations on the axes of the fundamental qualities, and because of different tendencies for motion in some direction because of that location. Therefore, it is said, for instance, *baʿẓ davāīn̲-i mushil kī aisī hotī hain̲ kih un ko munāsabat baʿẓ amzijah se hotī hai. aur baʿẓ amzijah se un ko munāsabat nahīn̲ hotī*.[657] In other words: Some purgative medicines are such that they are appropriate for some temperaments while for other temperaments they are not at all appropriate. The implication of this is that an identical disease with identical manifestation of symptoms in two different individuals would not call for an identical medicinal regime. Indeed, the author states: *moʿālijīn ko ḥukm diyā jātā hai kih jab kisī shak̲h̲ṣ kī tadbīl mizāj karnā cahiyīn̲ ek davā par iqtiṣār karīn̲ jis vaqt kih aṣ̲ar us kā ẓāhir na-hotā ho balke dūsrī davā badl deṇ̲*.[658] So: The admonition for physicians is that when they wish to change the temperament of someone and when a certain remedy has no visible effect, they should cut it short and change to a different remedy instead. This further deemphasizes disease type in treatment considerations, and would lead us to expect this type of more individualized, temperament-based approach for those who are dying as well. That is, the nature of the disease would take a back seat to the nature of the body.

[657] Ibid., 258.
[658] Ibid., 18.

Temperaments have a relationship with humors, as seen above, but are not the humors themselves. Humors are substances; therefore, all humors can be in excess at the same time. In the CS, such a state of all humors being simultaneously agitated is known as *sannipataka,* and it describes a particular disease state: the worst on the prognostic scale for any given illness. It is, therefore, commonly associated with fatal illness and so categorized as untreatable. Akin to the problem of impediments to treatment seen above, in the CS in such a case the view is that any treatment would be in conflict with one humor or another, simply exacerbating the problem while trying to solve it. It is a state of medical checkmate. For this reason, treatment is halted in serious illness when all three humors are all disrupted. In the tQ, on the other hand, we see evidence of treatment proceeding even when all four humors are out of line. For example, we read: *faṣd ek istifrāg̲h k̲h̲āṣṣ hai vāsṭe har ek k̲h̲ilṭ ke barābar*.[659] That is: Bleeding is a special manner of discharge for when every single humor is at an equally [disrupted] level. Having all the humors involved does not put an end to treatment because there is an effective remedy for the problem. Thus, the mutual agitation of the humors does not appear to necessarily signal the gravity and fruitlessness it does within in the ayurvedic tradition.

However, stage of illness plays a kind of role here. In acute illnesses, for example, strengthening food is recommended early on, before symptoms are pronounced. The recommendation, though, changes with the advance of the disease, as we can see in the following statement: *aur amrāẓ me̲n ziyādatī paidā ho g̲h̲iẕā kī taqlīl karte hai̲n ba-e'timād tadbīr sābiq ke. aur ba-k̲h̲ayāl is bāt ke kih quvvat ko vaqt mujāhadah maraẓ ke do ṯaraf mutvajjih hone kā bojh nah paṛe*.[660] In other words: Food is decreased for strengthening illnesses as per the preceding action plan and in consideration of the matter

[659] Ibid., 251.
[660] Ibid., 243.

that the vitality should not have to be burdened with working in two directions at the hour of struggle. This may be reflected in the medical folk wisdom of today when we proclaim that one should feed a cold, but starve a fever. But we should pay special attention to the statement about "the hour of struggle." The importance of crisis in this medicine has already been discussed, but this statement also tells us something about medical approaches to death. The statement is indirect, but the fact that these acute illnesses have an hour of struggle implies that the struggle may be lost or won. Presumably in an acute disease with a crisis, to lose means to die. The emphasis remains that these would-be-fatal illnesses could go either way. And the approach is reflected in cutting back on food in order to unburden the bodily strength, the vitality. What is this power? It is the natural facility of the body to bring itself back to homeostasis. Again, this shows medical interventions as a support for something that ultimately happens beyond it. What carries out that struggle needs, in the end, to be freed of constraint, of what would hold it back from performing its duty.

It is an interesting medicine which ultimately has a strong distrust of drugs, or at least a real hesitation in using them. A millennium later the founder of the osteopathic school of medicine in the United States, Andrew Taylor Still, echoed such a sentiment, saying, "You do not need drugs. The blood has a hundred drugs of its own of which the doctor knows nothing. But the body's drugs actually cure disease, whereas the doctor's drugs kill."[661] The Q never goes that far. Still, the author states:

> *agar sabab-i maraẓ kā ḥarārat aur burūdat meṉ mushtabehah ho aur irādah yeh ho kih tajribah se daryāft karīṉ cāhiye kih quvī davā se tajribah nah kiyā jāe varna jo tāṩīr davā-i quvī se kaifīyat bila'araẓ paidā ho gī aṣlī sabab ke pahcānne meṉ dhokā khā de gī.*[662]

[661] Robert E. Truhlar, *Doctor A.T. Still in the Living,* Chargrin Falls, Ohio: Robert E. Truhlar, 1950, 33.
[662] Ibid., 247.

> If it were to be unclear whether the cause of an illness is from heat or cold and the intention were to discover by experiment, one should not experiment with powerful drugs otherwise a state with [additional] symptoms will arise from the effect of the medicine, and one will be misled in his discernment of the true cause.

This statement contains a prohibition and an injunction. Powerful drugs are not to be used lightly, and the physician needs to take care not to be led into error. That one can be deceived by secondary symptoms and/or ailments presumes than some are, but the sentence is structured squarely as advice. The warning against inept physicians who would make such an error is not present here. This differs radically from what was commonly seen in the CS. What external conditions might lead to this? Are there actually fewer incompetent medical practitioners around? Or do they present less of a threat somehow? Is the audience for this treatise different in some substantial way from that of the CS? Perhaps in an era of royal courts and royal support, physicians would not wish to emphasize the riskiness of medicine as their patrons might be reading what they have commissioned? Could this reflect an increase in the potency of medicines, making drugs more dangerous than ever before?

The hazardous nature of drugs is referred to over and over again. Above the danger was in the application in a situation when the nature of the disease was not fully understood, but danger is mentioned elsewhere in relation to the quality of the substances used in medicines as well. For instance, we are told: *ba'ẓ adviyah mushilah aisa haiṉ kih un kā ẓarar bahut ziyādah hotā hai jaisa k̲h̲arbiq siyāh yā tirbid agar saped nah mile balke zard ho*.[663] Meaning: Some purgative medicines are such that they are very harmful, for example black hellebore or turpeth root which are not white, but rather yellow. This problem comes from the inferior nature of the plant matter, and if the patient reacts badly, the physician is told to have it expelled from the system as soon as possible.

[663] Ibid., 258.

However, even if the best quality, most appropriate medical substances are used, some treatments inherently carry danger. For example, in relation to inducing vomiting, it is said: *agarce manāfe‘ akṯar amrāẓ ba-vajh qai paidā hotā haiṉ jaise ṯarsh*.[664] That is: Although there are benefits, frequently ailments arise due to emesis, such as deafness. What is meant to cure may at times cause other problems of varying degrees of severity as side effects. At times the side effects are deemed worth it, as we have seen above in regard to venesection and fatal swellings. Sometimes, though, the danger is more situational in the sense that certain accompanying symptoms or complicating conditions make a treatment dangerous in a way it would not normally be. For instance, we are told: *ek ḵẖaṯrah mushil ke ko’ī ḵẖushk fuẓālah am‘ā meṉ maujūd ho*.[665] In other words: Use of a purgative is dangerous when there are dried out remnants present in the intestines. Or, another example is: *ishāl aur qai us shaḵẖṣ ko bahut dushvār hai jis kā mirāq lāgẖar ho akṯar aise shaḵẖṣ ko ta‘ab paidā hotā hai ḵẖālī andeshah se nahīṉ hai*.[666] Meaning: There is much hardship in purging the bowels and causing vomiting in an individual whose hypochondrial region is weak; generally, such a person experiences exhaustion. [Plus] it is not devoid of danger. In these cases, the physician is cautioned about possible situations where complications might impact the procedure, but another issue comes from a procedure carried out which did not for whatever reason produce its desired effect. Purgatives, once again, make an appearance in this regard: If a purgative medicine does not act, and afterwards no deleterious symptoms appear, one still ought to do a bleeding […] Assuredly. Because if a bleeding does not remove them, there is fear of the movement of humors towards certain principle organs. That is: *agar davāe mushil ‘amal*

[664] Ibid., 261.
[665] Ibid., 254.
[666] Ibid., 253.

na-kare aur us ke ba'd e'rāẕ bad paidā na-hoṉ jab bhī faṣd karnā cāhiye [...] kyūṉ na-ho is-liye kih agar faṣd nah le jāe k̲h̲auf ḥarkat ak̲h̲lāṭ kā taraf ba'ẓ a'ẓāe ra'īs ke hotā hai.[667] Why is this the case, and what are its implications? A purgative which is meant to expel a humor but does not achieve that is said to put it in motion *(taḥrīk*), thereby causing it to spread within the body.[668] The humor which needed to be decreased is augmented in various places instead. The principle and vital organs are most necessary for the functioning of the body, so impact of an excessive humor in those locations is all the more deleterious, potentially even deadly.

The common dangers of drugs and medical procedures slide, at times, almost imperceptibly into physician error. For example, in a situation contrary to the one above where the purge fails and no symptoms are seen, where instead symptoms *are* perceptible, the following recommendation for a correction is given: *aur ak̲sar davāe mushil ke qai kar ḍālne kī aise vaqt ḥājat hotī hai. aur beshtar yeh dushvārī faqaṭ qābiẓ cīzoṉ ke khāne se daf' jātā hai*.[669] So the advice is: At such times, there is usually a need for inducing vomiting of the purgative medicine. And for the most part this difficulty is dispelled by eating something astringent. What is striking here is that once again, physician error or ignorance is not emphasized. A difficulty, *dushvārī,* rings more of a bad stroke of luck, of something that could happen to anyone in the situation rather than error, which implies agency. Agency is also obscured by treating errors passively, for example in the following case of venesection. We read: *yeh bhī jānnā ẓarūr hai kih nishtar kund se maẓarrat ziyādah paidā hotī hai is-liye kih us se k̲h̲aṭā paidā hotī hai aur rag tak nahīṉ pahoṉctā hai aur varam paidā hotā hai.*[670] That is: It is also necessary to

667 Ibid., 258.
668 Ibid., 253.
669 Ibid., 256.
670 Ibid., 247.

know that a dull scalpel causes a great deal of harm since from it an error happens, and so the vessel is not even reached, and inflammation occurs. The word *k̲h̲aṭā*, error or wrong action, found with *se* and *honā,* as here, becomes intransitive and takes on a passive sense in a manner as described by Asani and Hyder, as opposed to when it appears with *karnā* which carries an active, transitive sense.[671] With *karnā,* one commits an error. Without it, an error happens. So, once again error is not attributed to physician ignorance or lack of skill, or even to the physician at all, rather it is the instrument which errs. This can be contrasted with a description of the correct procedure: In a case where the scalpel is sound, it is not proper to jab into the vessel, rather one should cause the tip of the scalpel to reach the vessel in a relaxed manner and should encourage that very tip so that the vessel is nicely unladened. That is: *agar nishtar durust hoā se andar cubhonā jā'iz nahīn̲ hai balke ba-asānī rag tak sirā-i nishtar kā pahon̲cānā cāhiye aur yahī ko shush karnī cāhiye kih rag k̲h̲ūb ubhar āe*.[672] This sentence is far more active. There are, for example, two overtly causative verbs here: *cubhonā,* to cause to pierce, and *pahon̲cānā,* to cause to reach. Plus, the verbal infinitive construction seen with the *cahiye* creates a sense of obligation, and hence an obligation for someone. It indicates what one ought to, or ought not, do. Furthermore, *shush*, which I have translated as encourage, comes from the noise a person makes encouraging a dog to chase something.[673] So, all in all, there is a real sense of a person behind this instrument, directing its action. The passage goes on to give warnings of what to do and not to do, but there the error is only potential. What the "one" has done so far is only correct. This is not to say that there is never an action which is recognized as the physician's error, for example, in regards to pain we are told: *kabhī*

[671] Ali S. Asani, and Syed Akbar Hyder, *Let's Study Urdu,* 346-7.
[672] Kantori, 274.
[673] John T. Platts, *A Dictionary of Urdu, Classical Hindi, and English,* 727.

ba'd dard ke ek khatak bāqī ratī hai kih ḥaqīqat meṉ vah dard nahīṉ hai.[674] So: Sometimes after pain, a pricking remains which in reality is not pain. Ibn Sina states that this is one of those things which take care of themselves, yet adds: *aur jāhil nā-dānī se us ke 'ilāj meṉ mashg̲h̲ūl hotā hai pas ẓarar pahoṉctā hai*.[675] Meaning: But the ignorant blockhead engages in treating it, and consequently causes harm. Here the practitioner is most definitely the agent who causes the harm, and here the physician is emphatically identified as ignorant. Lack of knowledge is the source of the problem. It is an error which should not happen. Nevertheless, the bulk of the errors, or potential errors, encountered in the text are presented as par for the course. This blameless possibility of error may be why there are also repeated admonitions about what to have on hand in case a mistake is made so that the practitioner can then remedy the situation. The text takes for granted errors will occur with some frequency. In the case of surgical incision, for example, a list of materials which stop bleeding is given and then the physician is told: *vah sab k̲h̲ūn ko rok dete haiṉ. agar barāh k̲h̲aṭā yā ẓarūrat k̲h̲ūn nikālā giyā ho*.[676] In other words: Those all stop the blood. If by way of error or necessity blood were caused to come out. In this statement it is worth noticing the full stop before the word *agar,* if. This is a text that has no love of pauses. An entire page can pass by without sight of a punctuation mark. Thus, this full stop makes an almost dramatic pause, quite separating the spurting blood from the cause. Precautions of this sort are particularly understandable in cases where blood could be lost, leading to rapid death, but such precautions are seen in a wide range of circumstances. Moreover, counter treatments are not only seen in the case of errors, but are an integral part of some treatments. In this regard, we are told of

674 Kantori, 145.
675 Ibid.
676 Ibid., 281.

purgatives: *akṣar qavī davāīṉ jis meṉ sammīyat hai vah ishāl ko us ṭarḥ paidā kartī haiṉ kih ṭabī'at par ghālib ā jātī haiṉ aisī vāsṭe vājib hai kih aisī davāoṉ kī iṣlāḥ un cīzoṉ se kartī cāhiye jin meṉ quvvat fād-zahr kī maujūd ho*.[677] That is: Usually forceful medicines have toxicity, producing purging due to that such that it completely overpowers the constitution. On account of this, it is necessary that one should make a correction for such medicines from those things which have the force of an antidote. Poisonousness or toxicity and talk of antidotes emphasizes the dangerous nature of medical treatments. But it also emphasizes the physician's role in medical treatment. In respect to organs, we may have learned that they are not homogenous; the situation is not akin to 5+5 = 5+5. However, the matter of treatment does strike one as working with a delicate balance scale. In this case, a little poison is added to one side which must then be counterbalanced by a bit on antidote. The delicacy comes across also in the concern about overshooting a physiological goal. And the homeostatic ability attributed to the body is akin to the slight wavering of an actually balanced scale, adjusting to the last piece of added weight before coming to a standstill.

But our question remains, what does this tell us about medical approaches to death and dying? Earlier, in relation to potentially deadly degrees of pain, we saw just this kind of balancing. There the pressing need to protect a life was weighed against the non-deadly harm of anesthetizing the patient, but actual harm nonetheless. This gave us a view of a treatment philosophy which considers both branches of an either/or prognosis at once. It seems rather like the same kind of vision which is needed to keep two pans of a scale in mind, attending now to this one and now to that. What was on that scale was both life and death. The physician neither wanted to have his patient slip away, nor did he

[677] Ibid., 259.

want a patient who would happen to live to be any the worse off than prior to the incident due to side effects from the treatment. The situation at the moment of crisis is being considered as well as the patient's long-term health and fitness. And it is precisely the visualization of a bifurcation of possibilities that allows this type of care to develop. One might call it comparative medicine, not in that it looks beyond itself at other traditions of medicine, but that it keeps in mind *and* gives treatment for multiple outcomes. End-of-life care here simultaneously entails midst-of-life care.

Still, there is one final question to ask. This bifurcation of outcomes, as stated previously, implies one does not know which way things will go. Dual outcomes are considered and attended to precisely because the outcome remains undetermined. So, what about cases in which the patient is actively dying? Is there any evidence of different approaches to treatment in those cases? Previously there was an indication that a person with a fatal swelling still received treatment. More evidence along these lines is seen in regard to a particular type of abnormal black bile. The malady is described thus: *muddat darāz meṉ muntahī ṭaraf ihlāk ke hotā hai magar tahalīl us kā bahut dushvār hai aur naẕj pāne meṉ us ke nihāyat vaqt hai 'ilāj-paẕīr bhī mushkil se hotā hai.*[678] As translated: It takes a long time [for it] to culminate in death, but its dissolution is very difficult, and its coming to a head takes a great deal of time, and also it is very resistant to treatment. The fact that it has lethal motion, albeit slow, tells us that it is in the process of killing the patient. Because it is obstinate in response to medication, we know that in spite of any difficulties in treating it, it is still being treated. Medication is given; treatment is attempted. The fact that it is difficult to treat does not mean that it is entirely unresponsive. Thus, it appears that untreated, this malady would certainly result in death,

[678] Ibid., 28.

but that treatment once again gives some possibility of success. Thus, once again, the outcome is not predeterminable. A more striking example is in relation to young children:

> *kabhī in ke badan meṉ baṣūr aur dāne barāmad hote haiṉ agar ba-shakl qarḥah ke siyah siyah hūṉ qātil haiṉ aur agar safed hūṉ aslam haiṉ aur isī ṭarḥ surḵh aur agar qulā‘ hai aur siyah ho jab bhī qātil hai phir tamām badan meṉ phail jānā kyun-kar mohlik na-hogā. beshtar aise baṣūr ke nikalne main bahut se manāfe‘ hote haiṉ ba-har hāl un baṣūr kā ‘ilāj mujafafāt laṭīf se kartā cāhiye jo aise pānī main dāḵhil kiye jāīṉ jaise yeh baṣūr dhoe jāte haiṉ aur us meṉ miṣl gul surḵh aur ās aur barg-i shajar-i muṣṭakā yā jhā’ū kī pattī josh de giyī ho*.[679]
>
> Sometimes pustules appear on the body which are small and round. If they are festering and very, very black, then they are fatal. But if they are white, they are safe, and also that kind which is red. But if it is just affecting the mouth and is black, then it is as deadly as when it is spread over on the entire body because that would not be a vital part.[680] Generally, when these pustules appear, there are very great benefits when one should, in any case, make a gentle potpourri remedy and they would be immersed in that water, just as these pustules are washed, as for example with the likes of red rose, myrtle, and leaves from the gum-mastic bush or from the tamarisk tree which are boiled

This example indicates that a dangerous, fatal illness is being treated in *exactly* the same manner as a more benign one. And in this case, it does appear that the outcome is predeterminate. One wonders if what we are seeing is something along the lines of comfort care, doing what one can for a rapidly fading infant; for, even though there is no overt mention of palliative care, this is a gentle therapy. When treatment of pain was mentioned above, the concern was to prevent the pain from so overwhelming the individual that death would result. Nevertheless, continued treatment of diseases acknowledged to be imminently fatal intimates such care. A second possibility would be that the continued care is for the family of the child, who would then be comforted by the idea that something was still being done. However, the text is silent in this regard. And

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679 Kantori 205.

680 I take the meaning here to be that the surface of the body is not a vital part, but the mouth is; therefore, the smaller area of infection is still deadly because it is a vital part while the greater spread which is deadly does not occur on such a vital organ.

given the fact that extended family is so important in this culture, it is an earsplitting silence.[681] No mention of family at all nor advice on how the physician ought to interact with them when a patient is dying is given. But as we have seen in observing the history of attitudes towards death in the West, silence surrounding death does not mean that social relations are being ignore; in that case, the hospital was initially complying with social attitudes and norms. In Ayurveda, on the other hand, we had a couple of glimpses through this veil of silence. The physician tried to avoid informing the family so as to make the cessation of treatment easier. But there was also the case of the physician asking the family for permission to treat one who was dying. To need to ask the family for permission to treat would suggest to some extent a prevailing attitude against such treatment, though the fear of a family asking for continued treatment would indicate that there must be conflicting views on the matter. At any rate, we most definitely see that in Unani the severity of a disease does not impact the physician's inclination to treat it. And we definitely see that a tendency towards prognostic bifurcation leads to a new level of care, and one we may now have forgotten or relegated to the dim background in crisis situations: It is an end-of-life care which still keeps the middle-of-life in mind.

[681] One only has to bring to mind the plethora of terms for various family relations which instantly locate someone within the greater structure of extended family to see this is an active concern. Someone is not simply an aunt or uncle, but a maternal or paternal one. This uncle is the older brother of one's parent, etc. What is carried in the name indicates the importance of one's relative role.

Chapter 6: *Qabriya*

milā hai k̲h̲āk me̲n̲ kis kis ṭaraḥ kā ‘ālam yā̲n̲
nikal ke shahr se ṭuk sair kar mazāro̲n̲ kā[682]

Just what kind of world is this here found in the dust?[683]
Get out of the city and ramble a bit among graves…

THE TEXT

In this chapter we will begin by letting the grave speak to us and then try to determine what it has said. That is, the text of the *Qabriya,* the *Grave Treatise,* will be presented followed by analysis. External sources referencing the text or otherwise shedding light on it will be examined as well as clues from the text itself in order to try to locate it within the Unani medical tradition. And, as with the other chapters, the content will be viewed to gain a better understanding of medical approaches to death. Also as seen previously, ideas on life and lifespan, the nature of diseases and death, and signs and symptoms as related to prognosis and diagnosis will all play a part in coming to that understanding. Two manuscripts were consulted, one dated 1889 (and 1930) and obtained through the Ibn Sina Academy of Medieval Medicines and Sciences in Aligarh, the second dated 1938 and consulted at the Central Library of Jamia Hamdard in New Delhi. Variations between the two are minor and will be noted as they occur.[684] Because the

[682] Mir verse from Pritchett website. http://www.columbia.edu/itc/mealac/pritchett/00garden/00c/ 0040/ 0040_03.html. Translation is my own.
[683] Milnā would most commonly be translated as “mixed with”, and this sense is present in the verse. However, I have gone with the less common meaning of “found” based on the context. We go to graves because it is death that tells us what life is. In this sense, life is not merely mixed with the dust of mortality but is found through it.
[684] Both were complete copies. The 1889 ms had two cover pages, the first with the older date and the second with younger. However, the IAMMS copy was misfiled while I was still using it, never to be found again. Therefore, I did not have the chance to photograph it or to check over my transcription for minor errors. This could account for the inconsistent use of *nūn-guna* in it. The IAMMS copy tends to use both *nūn* and *nūn-guna* conventionally while the Jamia copy makes no use of *nūn-guna.* Both come out of the Naval Kishore Press. Precepts 17-25 come only from the Jamia ms because the IAMMS was misfiled before that section was completed.

treatise is quite short, it will be given here in its entirety as transliterated, followed by the English translation. The treatise in the nasta'līq script will be found in Appendix C.

bi- ʻaun-i ta'ālā
kitāb-i lā-javāb mash'hūr o maʻrūf fann-i ṭibb aʻnī qānūncah ʻarabī kā urdū tarjamah
mausūm bah
tarjamah qānūncah urdū maʻa risālah qabriyah
jis ko
ʻālim alamʻī fāẓil lūz̲ʻī maulavī ḥakīm g̲hulām ḥasnain ṣāḥib kantorī[685] ne min-jānib
maṭba ba- zabān urdū tarjamah farmāyā
maṭba munshī naval kishor lukhnau me̲n ṭabʻ hoā 1889

yeh vah risālah hai jis ko me̲n shurūʻ kartā hū̲n tarjamah kitāb-i baqrāṭ se jo kih ʻālim yūnānī ḥakīmo̲n kā ḥakīm thā baṛe baṛe māharān aur kāmilān fann-i ṭibb hai̲n[686] aur vahī risālah hī jo qabr me̲n baqrāṭ kī milā thā jab kisī g̲haraẓ se qabr khulī gayā thī is risālah ko yūnānī zabān se zabān ʻarabī me̲n hunayn bin ishāq ne tarjamah kiyā zamānah k̲hilāfat aur salṭanat-i māmūn rashīd men. aur hunayn ne yeh bhī kahā hai kih mujhe maʻlūm hoā tārīk̲h ke dekhne se kih jab baqrāṭ kā vaqt vafāt qarīb āyā us vaqt use ne ḥukm diyā thā kih yeh majmūʻah aḥkām us kī qabr me̲n rakh diyā jāe aur yeh sab paccīs qaẓāyā hai̲n aur baqrāṭ ne ḥukm diyā thā kih un ko hāthī-dānt ke ḍabbah me̲n band kar ke qabr me̲n rakh dī̲n tā-kih un par ko'ī ādmī āgāh na-ho[687] jab yeh k̲habar maʻlūm hoī bādshāh rom ne ḥukm kiyā kih yeh durhāe be-bahā ḍabbah se nikāle jāe̲n.[688]

pahlā ḥukm agar kisī bīmār ke cehr par varam ho aur us kā sabab maʻlūm na-hotā ho aur bayan hāth bīmār kā sīnah par us kā rakhā rahe pas maʻlūm karnā cāhiye kih vah shak̲hṣ terah roz ke andar mar jāe gā. k̲huṣūṣan agar avval maraẓ me̲n apne nathne ko khujlātā ho aur aise ʻabas be-kār feʻl me̲n mubtalā ho.[689]

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685 Some sources transliterate his name as Kintori.

686 Jamia ms uses *kā* in place of *hain*. A word on punctuation, it is used sparsely in either ms, perhaps only when it seems there would be confusion without it. Each precept begins in larger size writing, and so implies a full stop before it, but none is marked.

687 Jamia has *us* rather than *use* before the *ne ḥukm*. It lacks *us kī qabr me̲n rakh diyā jāe.* It adds *kih* in place of the *aur* to connect at *yeh sab*. Then it skips *aur baqrāṭ ne ḥukm diyā thā kih.* Inserts *us ke* before *qabr me̲n rakh dī̲n.* Finally, rather than *ādmī āgāh,* it uses *vāqif.* The meaning remains essentially the same, i.e., and Hunayn has also said this: From looking at history I know that when Hippocrates's hour of death was near, at that time, he directed that this collection of precepts that has 25 precepts in all, having been placed in an ivory box by them, be put in his grave so that nobody would be aware of them.

688 Jamia adds a *to* after *hoī.* Also uses *diyā* after *ḥukm* rather than *kiyā*.

689 Jamia ms has *cehrah* instead of *cehr* and omits *us kā* before *sabab.* Also, it has *ke* instead of *kā* before *rakhā*.

dūsrā ḥukm agar marīẓ ke donoṉ zānoṉ meṉ varam shadīd aur ‘azīm ho ma‘lūm karnā cāhiye kih tīn roz ke andar mar jāe gā k̲h̲uṣūṣan agar avval maraẓ meṉ us ko pasīnā ātā ho.[690]

tīsrā ḥukm agar rag-i jahandah gardan meṉ vaqe hai aur us ko shiryān sabāt jo nīnd paidā kartī hai choṭā sā dānah ātishak ke maraẓ kā bar-āmad ho mis̲l ṣūrat macchar jo ke us ki ṣūrat ho ma‘lūm karnā cāhiye kih vah bīmār bāvan roz ke andar mar jāe gā aur nishānī us ke marne kī yeh ho gī piyās use ziyādah lage gī.[691]

cauthā ḥukm agar kisī marīẓ ke dānah (az qism ṭā‘ūn k̲h̲vāh ātishak ke ho) mis̲l ba‘rah ke huṉ aur yeh vah makkhī hai jis ko z̲ubāb kalb kahte haiṉ jo kih mushābeh tuk̲h̲m bed-anjīr ke hoti hai ma‘lūm karnā cāhiye kih yeh marīẓ usī din mar jāe gā. aur nishānī us ki yeh hai kih avval maraẓ main yeh marīẓ garm cīzoṉ ke khāne kī k̲h̲vāhish kare gā jis kī ṭabī‘at k̲h̲vāh kaifīyat meṉ harārat ho.[692]

pāncvān ḥukm agar kisī kī ba‘ẓ anglīoṉ par ek phunsī choṭī sī siyāh mushābeh maṭar ke dānah ke ho aur dard shadīd hai us ko be-ārām kare ma‘lūm karnā cāhiye kih yeh ādmī apne maraẓ se do roz ke andar mar jāe gā aur nishānī us ki yeh hai kih ibtidāe maraẓ meṉ vah bahake gā ya‘ne haz̲yān aur ik̲h̲tilāṭ ‘aql ‘āriẓ ho gā.

chaṭā ḥukm agar kisī ke bāyān hāth ke angūṭhe meṉ k̲h̲vāh bāyān pān’on ke angūṭhe meṉ dānah ātishak kā k̲h̲ushk mushābeh dānah bāqilā ke ho aur rang dānah kā tīrah ho dard inhīṉ muṭlaq na-hotā ho pas ma‘lūm karnā cāhiye kih yeh shak̲h̲ṣ andar cha roz ke mar jāe gā ibtidāe maraẓ se. aur shanāk̲h̲t us kī yeh hai kih ibtidāe maraẓ meṉ us ko dast ziyādah āne hoṉ gī.[693]

sātvān ḥukm agar kisī shak̲h̲ṣ ke dāhine pān’oṉ ke bīc kī angulī par ek dānah bar-āmad ho jis kā rang mis̲l rang ujāl de hoe sone ke zard jaisā zard sonā zar-gar car̲k̲h̲ dene ke ba‘d nausādar aur shorah de kar nikālte haiṉ pas ma‘lūm karnā cāhiye kih yeh marīẓ ibtidāe roz maraẓ se bārah din ke andar mar jāe gā aur nishānī us kī yeh hai kih avval maraẓ meṉ us kī k̲h̲vāhish tez aur caṭpaṭī khāne shiddat se ho gī.[694]

āṭhvān ḥukm jab nāk̲h̲un angulīoṉ ke tīrah gūn hoṉ pashemānī par us shak̲h̲ṣ ke surk̲h̲ rang kā dānah paidā ho ma‘lūm karnā cāhiye kih yeh marīẓ cār din ke andar mar jāe gā ibtidāe maraẓ se. aur nishānī us ḥukm ke ṣeḥḥat kī yeh hai kih marīẓ ziyādah chīnktā aur ziyādah jamhā’ī letā ho gā.

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690 Jamia has *par* in place of *meṉ*, and uses *ibtidā’an* in place of *avval*, resulting in the same meaning.

691 Jamia has an *us* before *rag*, and a *se* after *ke*, and lacks the *jo* after *macchar*.

692 Jamia uses the Arabic *al* with *kalb*.

693 Jamia uses the feminine noun *bā’īn* in place of the masculine *bāyān.* And uses *bāqile* in place of *bāqilā*. It has *us meṉ* in place of *inhīṉ* and uses *bahut* in place of *ziyādah*.

694 Jamia omits *shak̲h̲ṣ*, adds *cīzen* before and *kī* after *khāne.*

navān ḥukm agar kisī ke donon pān‘oṉ ke angūṭhoṉ meṉ ba-shiddat khujalī ho aur gardan kā rang ziyādah tīrah ho ma‘lūm karnā cāhiye kih yeh marīẓ apne shurū‘ maraẓ ke pānchv[ān] roz mar jāe gā qabl az ān kih tanaffus us kā band ho aur nishānī ṣeḥḥat ḥukm hāẕā kī yeh hai kih vah marīẓ apne isī maraẓ meṉ peshāb ziyādah kartā ho gā.[695]

dasvān ḥukm agar kisī marīẓ kī palak par tīn dānah (ḥamrah vabāīah) ke aise hoṉ kih ek in meṉ se siyāh ho aur dūsrā nīlgūṉ ma‘lūm karnā cāhiye kih yeh ādmī sāt roz ke andar mar jāe gā aur nishānī ṣeḥḥat ḥukm hāẕā kī yeh hai kih avval maraẓ meṉ us ko thūk ziyādah ātā ho gā.[696]

gyārahvān ḥukm agar kisī kī ānkh ke ek papoṭe par dānah shibā’īh aḵẖroṭ ke paidā ho narm aur tīrah rang ma‘lūm karnā cāhiye kih yeh ādmī ek roz se le-kar do roz tak mar jāe gā ibtidāe maraẓ se aur nishānī us kī yeh hai kih avval maraẓ se us ko nīnd ziyādah ātī ho gī.

bāravān ḥukm jab bīmār ke donon nathnoṉ se ḵẖūn zardī aur surḵẖ milā hoā bahnā ho aur dāhine hāth meṉ us ke dānah sapaidī mā’il bar-āmad ho kih unhīṉ dard na-ho ma‘lūm karnā cāhiye kih yeh ādmī ibtidāe maraẓ se tīn roz ke andar mar jāe gā aur nishānī us ki yeh hai kih ibtidāe maraẓ meṉ us ko ishtehāe ṭa‘ām na-ho gī.[697]

teravān ḥukm agar marīẓ ki bā’īn rān meṉ ḥamrah shadīd ya‘nī surḵẖ bādah-i namūdār ho aur dard unhīṉ muṭlaq na-ho aur ṭūl varam kā tīn angusht ho ma‘lūm karnā cāhiye kih yeh marīẓ ibtidāe apne maraẓ ke pacīs roz ke andar mar jāe gā aur nishānī ṣeḥḥat ḥukm yeh hai kih avval maraẓ meṉ us ko khujalī ziyādah ma‘lūm honī ho gī aur buqīl ya‘nī sāg tarkārī khāne kī raghbat ziyādah ho gī.[698]

caudhvān ḥukm agar bā’īn kān ke pīche dānah saḵẖt mushābeh dānah nuḵẖud ke ho ma‘lūm karnā cāhiye kih yeh shaḵẖṣ bīs roz ke andar hī andar vaqt ẓuhūr dānah maẕkūr ke mar jāe gā nishānī us ke ṣeḥḥat kī yeh hai kih ibtidāe maraẓ meṉ us ko peshāb ziyādah ātā ho gā.[699]

pandrahvān ḥukm agar bā’īn kān ke pīche dānah namūdār ho ma‘lūm karnā cāhiye kih yeh bīmār roz maraẓ se caubīs din ke andar mar jāe gā aur nishānī ṣeḥḥat ḥukm kī yeh hai kih ibtidāe maraẓ meṉ yeh marīẓ mushtāq āb-i sard ke pine kā ziyādah ho gā.

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695 Jamia has *pas* rather than *ho* before *ma‘lūm*, and has *ghurūb āftāb se pahle*, before sunset, in place of *qabl az ān kih tanaffus us kā band ho*.

696 Jamia omits the *ho* after *siyāh,* omits *ṣeḥḥat*, and omits the *madda* over the *alif*.

697 Jamia has *meṉ* in place of *unhīṉ*.

698 It again has *meṉ* in place of *unhīṉ* and omits *apne*. It has *se* for *ke* after *apne maraẓ*.

699 Jamia has *se* for *ke* after *maẕkūr*.

solahvān ḥukm agar dāhine kān ke pīche surk̲h dānah tezī aur hiddat sāth ho jaise āg se jal-jāne se ābilah paṛ jātā hai jasāmat me̲n barābar bāqilā ke ho ma‘lūm karnā cāhiye kih yeh marīẓ sāt din ke andar mar jāe gā ibtidāe maraẓ se apne aur nishānī ṣeḥḥat ḥukm kī yeh hai kih avval maraẓ me̲n us ko qai ziyādah ātī ho gī.

satrahvān ḥukm agar kisī ke leḥyāh ya‘nī dāṛhī ke nīce surk̲h dānah barābar bāqilā ke dānah ke bar-āmad ho ma‘lūm karnā cāhiye kih yeh marīẓ bāvan roz ke andar mar jāe gā aur nishānī us kī yeh hai kih ibtidāe maraẓ me̲n balgh̲am yā maddah khankhār se us ke ziyādah k̲h̲ārij ho.

aṭhāravān ḥukm ba‘ẓ ādmīo̲n ke ḥashafah ya‘nī sar z̲akar me̲n dard shadīd hotā hai aur agar kisī ke yeh dard ho aur ba‘d azān us ke mirfaq ya‘nī band-dast k̲h̲vāh kalāī me̲n us ko ek dānah tīrah rang paidā ho vah marīẓ pāncvīn din mar jāe gā aur nishānī ṣeḥḥat ḥukm kī yeh hai kih avval maraẓ me̲n us ko sharāb pine kī k̲h̲vāhish ziyādah ho gī.

unnīsvān ḥukm agar dā’īn ṭaraf-i badn ke kisī jagah ko’ī phunsī az qism ṭā‘ūn k̲h̲vāh ātishak ke bar-āmad ho kih rang us kā tīrah ma‘lūm karnā cāhiye kih shak̲h̲ṣ ba‘d cha din ke ibtidāe maraẓ se mar jāe gā qabl ṭulū‘ āftāb ke aur nishānī ṣeḥḥat ḥukm kī yeh hai kih ibtidāe maraẓ us ko jamhā’ī ziyādah ātī ho gī.

bīsvān ḥukm agar kisī kī bā’īn bagh̲al me̲n phunsī barābar hī ke paidā ho ma‘lūm karnā cāhiye kih yeh ādmī pacīs din ke andar mar jāe gā ibtidāe maraẓ se aur nishānī us ko gahrī nīnd ziyādah ātī ho gī.

ekīsvān ḥukm agar kisī ke ka‘b ya‘nī qubba-i qadam par siyāh phunsī ṭā‘ūn vabāī bar-āmad ho ma‘lūm karnā cāhiye kih yeh shak̲h̲ṣ aṭṭhāīs roz ke andar ibtidāe maraẓ se mar jāe gā aur nishānī ṣeḥḥat ḥukm kī yeh hai kih shak̲h̲ṣ apne avval maraẓ me̲n havae sard aur sard gh̲iz̲āo̲n kā ziyādah mushtāq ho gā.

bāīsvān ḥukm agar kisī bāīn kanpaṭī par dānah jis kā rang surk̲h ho bar-āmad ho ma‘lūm karnā cāhiye kih yeh ādmī cār roz ke andar ibtidāe maraẓ se mar jāe gā aur nishānī ṣeḥḥat ḥukm kī yeh hai kih ibtidāe maraẓ me̲n ānkho̲n me̲n aisī khujalī uṭhī ho gī jis ke khujlānā se us ko mohlat nah ho gī aur bidūn khujlāe rahānah jātā ho gā.

te’ī’īsvān ḥukm agar kisī ke vasṭ sar me̲n varam narm mis̲l ak̲h̲roṭ ke paidā hoā jis me̲n dard na-ho. ma‘lūm karnā cāhiye kih yeh ādmī roz maraẓ se naue din ke andar mar jāe gā. nishānī ṣeḥḥat ḥukm kī yeh hai kih avval maraẓ me̲n us ke ūngh ziyādah rahtī ho gī aur k̲h̲arpuza yā tarbuz khāne kā ziyādah mushtāq ho gā aur peshāb bhī us ko ziyādah ātā ho gā.

cobīsvān ḥukm agar kisī kī kanpaṭī me̲n varam siyāh mis̲l macchar ke ho aur siyā hī us me̲n ziyādah ho ma‘lūm karnā cāhiye kih yeh marīẓ ibtidāe maraẓ se tīn māh ke andar mar jāe gā nishānī us kī yeh hai kih avval maraẓ me̲n us ko k̲h̲vāhish tarbuz khāne kī ho

gī aur bahut k̲hvāhish sā pānī kī aur peshāb bhī ziyādah us ko ātā ho jaisā baqrāṭ ne sard tarkārī aur sāg kī k̲hvāhish me̲n likhā hai (dekho caudhvān ḥukm).

pacīsvān ḥukm agar kisī kī gardan ke nīce aur ānkh ke papoṭe par safed phunsī paidā ho ma'lūm karnā cāhiye kih yeh ādmī ibtidāe maraẓ se ekīs shabo̲n ke andar mar jāe gā aur nishānī ṣeḥḥat ḥukm hāẕā kī yeh hai kih us ko avval maraẓ se mīṭhe khāne kī aur k̲harāb g̲hiẕāo̲n kī ishtehā ho gī.

tamām hoā risālah qabriyah muṣannifah ḥakīm baqrāṭ

k̲hātmah az ṭaraf mutarjim
cūnkih in sab aḥkām shai̲k̲h ur-ra'īs ne kitāb qānūn jild cahārum maqam boḥrān me̲n aur dīgar maqāmāt me̲n likhā hai aur un kī dalīlī̲n bhī likh dī hai̲n aur isī ṭarḥ se abū al-'abbas majūsī ne kāml aṣ-ṣannā' me̲n jā-ba-jā un ko darj kiyā hai ma' dalā'il ke aur qānūn aur kāml aṣ-ṣannā' tarjamah urdū ham kar cuke hai̲n aur in aḥkām ko salīs urdū me̲n likh cuke hai̲n hāẕā judā-gānah us risālah bhī tarjamah kar diyā kih ṭālib-i 'ilm-i mubtadī in pacīso̲n aḥkām ko yād le

THE TRANSLATION

With the help of the Most High,
an unparalleled book, famous and celebrated, on the art of medicine, meaning the Urdu translation of a treatise on medical principles from the Arabic
known as
the translation of the brief work on medical principles, the *Grave Treatise*, into Urdu
which
the learned, wise, erudite, guardian, scholar, physician Ghulam Hasnain sir Kantori
translated into the Urdu language for publication.
Printed in Lucknow by the Munshi Nawal Kishore Press 1889

I begin with a translation of a book of Hippocrates who was the wisest of the wise among the Greeks, extremely skilled and proficient in the art of medicine, and this is that treatise. And it is the exact same treatise which was found in the grave of Hippocrates when for some reason the grave was opened. Hunayn Ishaq translated this treatise from Greek into Arabic at the time of the Caliph and the reign of Mamun Ibn Rashid.[700] And Hunayn has also said this: From looking at history I know that when Hippocrates' hour of death was near, at that time, he directed that this collection of precepts would be placed in his grave, and it has 25 precepts in all, and Hippocrates directed that they, having fastened it in an ivory box, place it in the grave so that no person would be aware of

[700] Rashid was the 7th Caliph, 786-833. Ishaq's dates are given, depending on the source, as 808 or 809-873. That would make him 22 or younger at the time of this translation.

them. When this information became known, the emperor of Rome gave the order that they would bring forth this invaluable, priceless box.

The first precept is if there would be swelling on the face of some sick person and the cause of it were not known and the sick one would keep putting his left hand on his chest, then one should know that that individual will die during day thirteen.[701] Especially, if at the start of the illness, he would itch his nostril and would be distressed by the fruitless, ineffectiveness of the act.

The second precept is if there would be severe swelling on both knees of the patient and it is enormous, one should know that he will die on the third day, especially if at the start of the illness he were to sweat profusely.

The third precept is if there would be the emergence of the malady of tiny syphilis pustules, whose shape resembles mosquito shape, on the throbbing vein located on the neck which is called the lethargy vessel which produces sleep, one should know that that patient will die on day fifty-two, and the sign that he will die is that he will feel great thirst.[702]

The fourth precept is if some patient would have pustules (whether from a kind of plague or from syphilis) that are like goat dung, or like that fly called dog-fly which is like the seed of the castor oil tree, one should know that this patient one will die that very day. And the indication of that is this: that at the start of the illness the patient would have a desire to eat hot things, his temperament requiring the characteristic of heat.

Illustration 1: Goat Droppings[703]

[701] The meaning here from *ke andar* could be will die within 13 days or within day 13, i.e., during the 13th day. I take it as the latter because some precepts go on to specify a certain time within a particular day when a person will die and for additional reasons which will be discussed in the analysis section.
[702] I presume the mosquito shape is referring to the shape of a mosquito bite given that they are also described as tiny.
[703] Photo credit Robert E. Long. Used with permission.

Illustration 2: Castor Seeds[704]

Illustration 3: A Type of Dog Fly[705]

The fifth precept is if there would be a rather little [type of] black pimple on some fingers like a pea and the person would not be able to get any rest due to severe pain, one should know that this person will die on the second day of his illness and the indication of this is that at the start of the illness, he would be excited, meaning he would exhibit delirium and his mind would be muddled.[706]

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[704] Image use with permission. http://naikainbalance.blogspot.com/2012/02/haitian-treasure-castor-oil-aka-lhuile.html. Accessed September 24, 2017.

[705] Permission pending. Image from http://www.thepigsite.com/articles/contents/12-10-5Pig1.gif. Accessed September 24, 2017. This fly may not be the same type of fly referred to in the text even though it shares a common name. However, it does act as a good illustration of how a fly might look like a goat dropping and a castor seed.

[706] The word typically used for pustule, *dānah*, which also means grain or seed, can be used in a collective sense as well as in the sense of a single grain, or seed, or pustule. Context determines the choice of singular or plural for translation. Here, though, the term being used, *phunsī*, is qualified by *ek,* meaning one pimple, or a pimple. But given that multiple fingers are involved, I am taking this *ek* to refer to *a* type of pimple.

The sixth precept is that is if someone would have a dry pustule from syphilis, either on the left thumb or the left big toe, which resembles a fava-bean and its color is dark, and the pain would not become immoderate, then one should know that this individual will die on day six from the start of the illness. And the identifier of this is that he would have a great deal of diarrhea.

The seventh precept is if on the middle toe of the right foot of some individual a pustule would appear which would have the yellow color of polished gold such as goldsmiths cause to appear from turning on the wheel after having applied ammonium chloride and saltpeter, then one should know that this patient will die on day twelve from the initial day of the illness. And the indication of this is that at the start of the illness he will have an intense desire to eat spicy and pungent [food].

The eight precept is when the fingernails would be a dark color and a pustule would arise in that shade of red of someone ashamed, one should know that this patient will die on day four from the start of the illness. And the indication of health in the case of this precept is that the patient would sneeze and yawn a great deal.

The ninth precept is if someone would have violent itchiness on both big toes and the color of his neck would be very dark, one ought to know that this patient will die on the fifth day from the start of his illness, prior to which his breathing will stop. And the sign of health for this precept is that the patient would produce a great deal of urine during his illness.

The tenth precept is if there would be three pustules (of red plague) on the eyelid of a sick person such that one among them would be black and another deep blue, one should know that this person will die on day seven, and the sign of health for this precept is this that at the start of the illness he would have copious saliva.[707]

The eleventh precept is if on the eyelid of someone a pustule would arise which is like a walnut, yielding and dark in color, one should know that this fellow will die within one or two days from the start of the illness. And the indication of this would be that at the start of the illness, he would feel very sleepy.

The twelfth precept is when blood which is red and yellow is found to flow from both nostrils of a sick person and a whiteish pustule would appear on the right hand which is not painful to him, one ought to know that that person will die on day three from the start of the illness, and the indication of this is that at the beginning of the illness, he would have no appetite for food.

[707] Red plague is small pox.

The thirteenth precept is if on the left thigh of the patient an intense red should appear, that is, wine-red, and the pain is not immoderate, and the swelling is three fingers in length, one ought to know that this patient will die on day twenty-five from the start of his illness. And the sign of health with this precept is that he would know a great deal of itchiness and would have a great desire to eat greens, that is vegetable puree.

The fourteenth precept is if behind the left ear there would be a pustule which is hard like a chickpea, then one should know that this individual will die at, certainly at, the time of twenty days from the appearance of the aforementioned pustule. The indication of his health is that at the start of the illness he would pass a great deal of urine.

The fifteenth precept is if a pustule should appear behind the left ear, one should know that this sick one will die on day twenty-four from the day of the illness, and the sign for health in this precept is that at the start of the illness there would be a great desire to drink cold water.

The sixteenth precept is if behind the right ear there would be a red pustule which is hot and intense such as a blister arising from being burnt by fire, the size of which is equal to a fava bean, one ought to know that this patient will die on day seven from the beginning of his illness, and the sign of health for this precept is that at the start of the illness, he would have a great deal of vomiting.[708]

The seventeenth precept is if a red pustule emerges under the whiskers, i.e. the beard, of someone [and] which [pustule] is equal in size with a fava-bean, then one ought to know that this patient will die on day fifty-two, and the sign of this for him is that at the start of the illness, he would expel a great deal of phlegm or matter.

The eighteenth precept is if severe pain would arise on the penis of some guys, that is, on the head of the male member, and if this pain would thereafter become greater for someone and a dark colored pustule would arise at the attachment, that is either at the wrist or the forearm, [then] that patient will die on the fifth day. And the indication of health for this precept is that at the start of the illness, he will have a great desire to drink alcohol.

The nineteenth precept is if some dark colored pimples would arise somewhere on the right side of the body, whether of the kind from plague or from syphilis, one ought to know that the individual will die after six days from the start of the illness before sunrise, and the indication of health for this precept is that he would yawn a great deal at the start of the illness.

[708] With the word *āg*, fire, through the end of the twenty-fifth precept, only the Jamia ms was available.

The twentieth precept is if pimples which are exactly equal in size should appear in the armpit or groin of someone, one should know that this person will die on day twenty-five from the start of the illness, and the indication of this will be he has a great deal of deep sleep.

The twenty-first precept is that if black pimples of the plague epidemic would arise on the heel, that is, on the arch of the foot, one should know that this individual will die on day twenty-eight from the start of the illness, and the sign of health in this precept is that if the individual would desire cold air and cold food at the start of his illness.

The twenty-second precept is if someone should have a red pustule appear on the left temple, one should know that this person will die on day four from the start of the illness, and the sign of health for this precept is that at the start of the illness an itchiness will arise on the eyes which the itching of gives no respite to him and without itching, it will remain [itchy].

The twenty-third precept is if a soft swelling arises on the center of someone's head which is like a walnut and is painless, one ought to know that this person will die on day nine from the day of the illness. The sign of health for this precept is that at the start of the illness, he would keep feeling drowsy and have a great desire to eat marsh-melon or watermelon, and so he will also produce a large amount of urine.

The twenty-fourth precept is if someone would have a black swelling on his temple like of a mosquito and within it [a part which is] even more black, one ought to know that this patient will die three months from the start of the illness. The indication of this is that at the start of the illness, he would have a desire to eat watermelon and have a very great desire to drink water, so also produce a great deal of urine, as Hippocrates wrote in regard to the desire for cold greens and leafy greens. (See precept 14.)[709]

The twenty-fifth precept is if a white pimple would arise low on someone's neck or on the eyelid. One ought to know that this person will die on night twenty-one from the start of his illness, and the sign of health is for this reason, namely, he would have an appetite for sweet things and bad foods at the start of his illness.

Completion of the *Grave Treatise* authored by physician Hippocrates

End of the translator's part[710]

[709] It is actually precept thirteen not fourteen which discusses this. It is not clear if the cross-reference is meant to be added by the Ishaq or Kantori. Obviously, since it mentions Hippocrates by name, it is not meant to be a part of the original writing, if one were to attribute an original to Hippocrates.
[710] Here the original IAMMS ms picks up again.

Because Shaik ur-Rais wrote all these precepts in the fourth volume of his *Canon* in the place dealing with crisis and in other places, and also included the indications, and likewise Abu al-Abbas Majusi inserted these and along with their indications here and there in his *Complete Art,* and I have already translated the *Canon* and the *Complete Book* into Urdu, and have already written these precepts in straightforward Urdu, thus this treatise has been translated separately so that young students would remember these twenty-five precepts.[711]

THE ANALYSIS

It is in relation to Kantori's translation of Ibn Sina's *Canon* that I first encountered mention of the *Qabriya,* in Syed Zillur Rahman's *Commentators and Translators* under the biographical information on Kantori.[712] The title perked my interest. More information on the text is found in Rahman's *āʾīnah tārīk̲h̲ ṭibb*, or *A Mirror of the History of Ṭibb.* Among the information we get there is a history of various titles for this work. The original Arabic title is said to be *ʻalāmāt al-qaẓāyā* (علامات القضايا) which may be translated as *Discourse on Symptoms* or, perhaps better, *Propositions about Symptoms,* and the original translator bringing the document from Greek to Arabic is said to be the well-known Hunayn Ibn Ishaq.[713] Unfortunately, Rahman was not able in his researches to find a document by this title credited to Ishaq. Rahman posits that the reason for this could be: *us kī ek vajah to yeh ho saktī hai kih ek nihāyat mukh̲taṣar risālah hai. mumkin hai hunayan ke tarājim ke ẕikr meṉ muʾarrikh̲īn ne us tarjamah ko ahamiyat nah dī ho*.[714] That is: Actually, one of the reasons for this could be that the treatise is extremely short, [so] it is possible that historians did not give any importance to this translation in the mention of Hunayn's translation. However, he does find mention of

[711] Shaik ur-Rais is a reference to Ibn Sina. Majusi's work is referenced with an incomplete title, the full title is *kāml aṣ-ṣannāʻ al-ṭibbiyah,* known in English as the *Complete Book of the Medical Art.*
[712] Rahman, *Commentators and Translators*, 165. The first Urdu edition of this text is date 1986. I have a copy of the first English edition from 2014. Here he seems more suspect of the origin of the treatise, saying that it was "supposed to have been found in the grave of Hippocrates."
[713] Rahman, *āʾīnah tārīk̲h̲ ṭibb*, 17. I have transliterated this with the Urdu pronunciation. The *ẕ* in Arabic would be pronounced as *d*, I believe. Hunayn's dates vary a bit by source but are approximately 809-873.
[714] Ibid.

a treatise called *addāll ʻalā al-mawt* (الدال على الموت), *Indications of Death* associated with the historian Ibn Abi Usaibi'a which mentions having twenty-five propositions, the new title being seen as an appendage to the old, clarifying the content.[715] The link to the current title is made by Rahman via an eighteen-page, handwritten commentary on the treatise seen in a private collection in Lucknow which has no author attribution. In regard to this, he writes: *us sharḥ ke ibtidā'ī ta'arufī jumloṉ meṉ risālah ko qabriya ke nām se mausūm kiya gayā hai*.[716] That is: At the start of the commentary, in the introductory sentences, the treatise is called by the name *Qabriya*. Rahman posits that this is why the treatise is known by this name in India. This commentary was completed in 1264, but that is 1264 A.H., so 1848.[717] This is the very city where the Urdu translation is first published less than fifty years later, so one wonders if this commentary might have been a work of Kantori prior to making the Urdu translation, or at least prior to its publication.[718]

From this information, then, we have two translators Hunayn and Kantori, with a historian in between. In looking at the text itself, it is not immediately apparent whose voice it opens with because the introductory section appears in both the Arabic and Urdu.[719] Thus, if it were just the words of the Urdu translator, he would have had to back translate his introduction into Arabic and decide to include that. Furthermore, the introductory statement in the original text is not set apart from the precepts in any manner. It just runs into them as the text continues to run throughout. However, this is set apart in the 1938 manuscript; the precepts begin on a new page even though there would

[715] Ibid. Ibn Abi Usaibi'a's dates also vary. They are approximately 1203-1270.
[716] Ibid.
[717] Ibid.
[718] His dates per page 163 of *Commentators and Translators* are given as 1829-1918.
[719] I am not a student of Arabic, but I can tell this much.

have been room to begin them on the opening page. Obviously, this was an intentional decision. And, of course, the content of the introduction soon makes it clear that it is not Hunayn who is speaking. On the other hand, in both the 1889 /1930 and 1938 copies, the closing remarks by the translator are clearly marked off with the notation regarding the end of the translation. In the introduction Kantori names the Arabic translator and relates what that translator has said about this particular treatise. As given in the translation above, Kantori writes: "And Hunayn has also said this: From looking at history I know that when Hippocrates' hour of death was near, at that time, he directed that this collection of precepts would be placed in his grave." Yet, some seventy-five years later one of the best Ṭibb scholars of his time was unable to even find an association between Hunayn and this treatise, let alone what Hunayn was reported to have said about it.

Nevertheless, Kantori does not leave all the weight on Hunayn and Hippocrates; In his closing words, he notes alternate locations for the precepts in two works he had previously translated: Ibn Sina's *Canon* and Majusi's *Complete Book of the Medical Art*. In fact, we see that he states: "Shaik ur-Rais wrote all these precepts in the fourth volume of his *Canon.*" All. No other location would be needed. No other manuscript required. Plus, both Majusi and Ibn Sina postdate Hunayn, which would have given them the opportunity to carry on this thread of knowledge about this treatise and its history. They could have been a part of passing on the origin of the precepts, but apparently are not. In addition to an alternate location where the precepts can be found, Kantori gives an alternate purpose for presenting these precepts which, as he states, he had already translated into straightforward Urdu as a part of those larger texts. Pulling them out and presenting them separately would make it easy for students to memorize them.

If these precepts exist elsewhere, why bring in the *Grave?* For one thing, it is an arresting story. Dramatic and memorable. It suggests roots and importance. For in this

tradition of medicine, Hippocrates is the root. He is essentially as far back as the tradition goes. It suggests an especial depth of knowledge, and one which ties this medicine to a common root with western medicine. That Hippocrates would choose this text among all others to request, even demand, to be buried with, furthermore, would elevate the importance of these precepts above all of his other writings. Precisely that, one would assume, would make Hunayn—who was to have known the story—continue the special emphasis on this treatise and make sure to pass that information on. The drama of the story contradicts the muddiness of its historical trajectory.

And what of the titles? Does one need to find the treatise in a grave to give it such a title? For as we have seen implied in the Ghalib verse above, tombs remind us of our mortality: from dust we came, to dust we will return. It does not seem to be any stretch of the imagination to call a listing of fatal symptoms *Grave Treatise* without having to involve an actual hole in the ground or tomb. In fact, in the English translation of *Commentators and Translators, Risālah Qabriyah* is rendered as *On the Signs of Approaching Death.*[720] There may even be echoes of death in the original Arabic title, *ʻalāmāt al-qaẓāyā* or *Propositions about Symptoms.* For *qaẓāyā* is the plural of *qaẓiyā* coming from the root *qaẓā / qadaa* (قضی) which means to decree or appoint. The feminine noun *qaẓā* in Urdu comes from this same root and means death in addition to destiny and decree. Not being an Arabic speaker, I cannot say how strong the resonance would be, but it seems likely.

But what does the ambiguous history of this text mean for its usefulness and place in this dissertation? Does it matter if it were a freestanding treatise or merely gleaned from other works? These questions can be partially answered by the relationship the

[720] Rahman, *Commentators and Translators,* 165.

gleanings have to the gleaned. That is, to what degree do these precepts resemble those found in the *Canon* or elsewhere? And in that sense to what degree are they a faithful representation of the medical views of that time. In order to explore this, we can look at a description of fatal symptoms found in the *Canon.* In this particular case, indications associated with various colors of urine are being discussed. We read*: aur besthar baul zaitī cauthe din maraẓ ke dalālat kartā hai kih marīẓ sātvīn din maut pāe gā ba-sharṭe-kih vah maraẓ amrāẓ-i hadd se ho*.[721] In other words: And, generally, when olive[-oil] colored urine appears on the fourth day of an illness, death will befall the patient on the seventh day, provided that the illness would be one of the acute illnesses. This follows the pattern established above in that we are given a symptom followed by a prognosis in the form of the day of death counting from the start of the illness.

Razi is not the author of one of texts mentioned above which were drawn from, but he makes for a useful point of comparison because he wrote about similar types of disease as those described here, i.e. those being manifest by some form of pustule or boil. He deals with this topic in several treatises. In his *Liber Continens*, he draws from the words of other renown physicians, as in this quote from Ahrun: "Pestilential ulcers are hot abscesses, which appear in the groin and armpit, and prove fatal in four or five days. Those which are black are malignant; the red are sometimes fatal."[722] This bears similarities to the precepts above in that color indicates a better or worse situation and a prognosis with an expected point of death is given, even though the timing here spans two days. We also see an identical prognosis for an outbreak whether it occurs in the groin or armpit in the *Grave Treatise*. These locations appear side by side in precept

[721] Ibn Sina, 182.
[722] Razi, *A Treatise on the Small-Pox and Measles,* 103-4.

twenty, though with pimples verses ulcers and a somewhat better prognosis, specifically, twenty-five days remaining rather than four or five.

Razi is also a useful point of comparison because he falls in between Ibn Sina and Hunayn in time. In fact, he quotes from Hunayn's son, Ishaq ibn Hunayn:

> As soon as many pustules have come out, you should commence the treatment by taking away blood either by the lancet or by cupping-glasses, until swooning comes on; and let the patient take barley-water. If his bowels are relaxed give him barley-gruel, especially in the Measles, which disease is often accompanied by diarrhea; and let him avoid all sweet and thick food.[723]

What we see here which is different from the *Grave Treatise* is treatment recommendations. As a matter of fact, the *Liber Continens* starts with general treatment recommendations based on the stage when the physician first sees the patient, whether at the start of any symptoms, or as the pustules are rising, or after they break, and so on. The *Grave Treatise*, on the other hand is totally lacking in any such recommendations. We also see a chapter within Razi's *A Treatise on the Small-Pox and Measles* where indications which identify better or worse forms of these diseases are given without any treatment advice, such as "When the smaller sort of pustules, which contain no fluid, break, and at the same time a delirium comes on, then the patient is near his end."[724] This is akin to the third precept above where very little pimples and delirium spell death within two days. However, this chapter of Razi's is part of a larger treatise where treatment strategies are discussed. Notice that in this example, death is said to be near, but no number of days is specified. This could be because death is imminent as we seen in the *Grave* example, but throughout this section the fatal indications attach no numbers to the prognosis. The place numbers are seen here is in relation to the day the pustules appear in relation to the start of the illness:

[723] Ibid., 114.
[724] Ibid., 73.

> When the pustules appear on the first day that the patient is feverish, they will hasten their progress and be of quicker motion; if they appear on the third day, the eruption will advance moderately; but if the first appearance is delayed beyond the fourth day, the eruption will be completed dully and slowly. When the eruption breaks out on the good critical days, it is a salutary sign, especially if the patient is relieved at the end of it.[725]

Both, nevertheless, share a sense of a predictable trajectory for illnesses based on accompanying symptoms—though Razi also gives more general prognostic indicators, for example a strong pulse, good appetite, and sound mind are positive signs above and beyond particulars.[726] There is also a general style which is similar, particularly between the *Grave* precepts and this chapter on mild and fatal types of the small-pox and measles. Each is fairly list like and characterizes the pustules by color and so forth, and gives accompanying symptoms beyond the pustules themselves. Razi enumerates eleven types, while the *Grave Treatise* gives twenty-five. One wonders if that latter number changed over time, however, based on the note at the end of the twenty-fourth precept which refers back to the fourteenth precept in relation to leafy greens. It is the thirteen precept, not the fourteenth, which actually mentions leafy greens. This could simply have been an error of the hand which meant to write thirteen, or the number of precepts could have changed at some point, or the order. It is also unclear as to whose note that is meant to be, presumably Kantori's, though possibly Hunayn's, or even an editor's. Still the text, for all its oddities, lines up with the tradition to an extent to tell us something about death, even if obliquely.

LIFE AND LIFESPAN

The focus in this treatise is on identifying the approach of death, so lifespan is only an explicit concern in the negative; that is, how many days does the unfortunate

[725] Ibid.
[726] Ibid., 71.

individual have left, such as in the first precept when there is a swelling of an unknown cause. Whatever it comes from, there is an understanding it is fatal: He will die in thirteen days, period. This accords with the viewpoint expressed in the *Canon* of each individual having a set amount of time which cannot be stretched, only preserved; lifespan is predetermined. However, there may be some ambiguity about this expressed in the bifurcation of possibilities as seen there and here as well. For example, the twenty-second precept runs thus:

> …if someone should have a red pustule appear on the left temple, one should know that this person will die on day four from the start of the illness, and the sign of health for this precept is that at the start of the illness an itchiness will arise on the eyes which the itching of gives no respite to him and without itching, it will remain [itchy].

The verb form used here for die is *mar jāe gā*. A future form which follows the subjunctive form, *ho,* found in the prior clause of this conditional statement, thus indicating a high degree of likelihood. If that first thing should happen, then this second one certainly will. However, the sentence does not end there. We also get what the indication of health would be. Moreover, this is not an oddity. In just under half of the precepts we get indications of death followed by indications of life. The patient will die, unless he does not. There are alternate possibilities.

We have to wonder how this is meant to impact or intersect with the idea of a set lifespan. An issue which came up in the *Canon* chapter as well. But here, having no discussions about lamps and fuel tanks or such intimating a set lifespan, the idea of a predetermined length recedes. Yet, another reading is possible. Notice that this sign of health is explicitly associated with an indication present at the start of the illness, as is also seen in most of these precepts. Therefore, one could read this as part of a cluster of signs which happens to shift the way the whole is read rather than an either or set of

possibilities. Thinking back to the meaning of *qaẓā* as both death and divine decree, it appears that would make a particular cluster of symptoms a decree, an announcement about the direction a particular life is now headed. This would mean that *ḥukm* could be taken less in the sense of a precept or rule of medicine to be memorized and more as, or at least equally as, a judgement, a judicial decision, with God as the decision maker.

THE NATURE OF DISEASE AND DEATH

So, is a cluster of symptoms a disease? Or more precisely are these clusters meant to be taken as a sign of a disease? Specific diseases are mention in connection with some of these precepts, such as the mention of syphilis in precepts three and six, or 'red plague' which is small-pox in the tenth or more generally, the plague or pestilence mentioned in precept twenty-one (the term used does not necessitate a particular kind of plague). However, the majority name no disease, and a few mention multiple ones, such as four and nineteen. The latter of these reads:

> …if some dark colored pimples would arise somewhere on the right side of the body, whether of the kind from plague or from syphilis, one ought to know that the individual will die after six days from the start of the illness before sunrise, and the indication of health for this precept is that he would yawn a great deal at the start of the illness.

The two main diseases mentioned are smallpox and syphilis, the significance of which we will come to in a moment. But first, we can see that each of these clusters of precepts is not meant to name some particular disease. At best they might indicate more and less severe varieties of an illness. Plus, that two separate disease types can occur with the same cluster of symptoms and the same prognosis tells us that disease type is of minimal importance here. The emphasis is on prognosis and how to make a correct determination of that prognosis. It implies that one does not treat a disease, one treats a presentation. What this means for death is that one does not die from a disease per se. One dies from a

combination of factors impinging on or emerging from the body (which brings in temperament in so far as the predominating characteristics of a temperament would influence expression of symptoms). This brings to mind Langford's description of the ayurvedic body as being more like a weather pattern than a biological system.[727] For her the fluidity between inside and out is disconcerting. It is less the tempestuousness that these precepts bring to my mind than the fact that what matters is how certain elements combine, this type of wind-direction with that level of humidity and these temperatures lead to *x* outcome. Death comes not due to a rare and strange entity, but due to a particular amalgamation. Furthermore, death comes in a timely matter, timely in the sense that it finds its place based on a trajectory. The arc makes the arrival of death more predictable. We will look more closely at the nature of symptoms right after considering the implications of the diseases named in the *Qabriya*.

The *Qabriya* provides another echo of Razi in that like his *A Treatise on the Small-Pox and Measles* this treatise highlights a pair of illnesses, one which is shared with the previous text and one which is not. Smallpox has a long history, stretching at least as far back as three millennia.[728] Ahrun, the seventh century Alexandrian physician quoted by Razi above, wrote a treatise on smallpox.[729] Death rates in the Mediterranean were high, but in Asia they were the highest, at times somewhere between 30-40%, in part due to different strains of the disease and in part due to accompanying factors such as famine.[730] Arnold writes that "smallpox accounted for several million deaths in the late

[727] Langford, 142.
[728] William H. Foege, *House on Fire: The Fight to Eradicate Smallpox,* Berkeley: University of California Press, 2011, 6.
[729] Sukdev Singh Sohal, "Revisiting Smallpox Epidemic in Punjab (c.1850--c.1901), *Social Scientist,* 43, no.1/2 (2015):62.
[730] Foege, 7.

nineteenth century alone" in India.[731] He also notes that death typically occurred within two weeks of the first appearance of symptoms.[732] Foege, who worked on eradicating the disease, conveys the horror of it in a very simple statement: "You can smell smallpox before you enter the patient's room […] On at least two occasions, smell alone alerted me to the presence of small pox."[733] One of these occasions was not set against the backdrop of a sanitized hospital, rather it was in a Pakistani slum, walking down an ally. In an understated way he mentions that there were competing odors. Anyone who has been to India or Pakistan can imagine this. It would be like hearing a sound so loud and distinctive that it would stand out in the cacophony of traffic and crowds in Delhi. To be surrounded by an epidemic of smallpox must have been unbearable. Arnold also points to the sad fact that the primary victims of the disease were very young. Because of the cyclic nature of epidemics in India "its principle victims were children born since the previous epidemic."[734] Syed Ahmad Khan, the founder of what was to become Aligarh Muslim University, gives one a sense of how common this experience was, in 1879 saying of the disease that it was "the inevitable bridge which every child has to cross before entering into life; and recovery from the disease is considered a second birth."[735] This is not what one typically thinks of upon hearing of India and twice-born. All of this makes it quite clear that in any treatise dealing with diseases producing fatal pustules, it would be no surprise to find descriptions of smallpox.

Syphilis is a different story, and one not without controversy. It typically presents with a single chancre which is firm, painless, and not itchy. In the second stage, it

[731] David Arnold, 116.
[732] Ibid.
[733] Foege, 4.
[734] David Arnold, 117.
[735] Ibid.

exhibits a diffuse rash, often on the palms of the hands or soles of the feet. In the third stage soft growths are seen. So, it is a good example of a disease which would have various clusters of symptoms associated with it. What has been controversial is its origin—with some arguing for a pre-Columbian presence in Europe (with an increase of virulence or prevalence over time), some for the transfer from the New World to the Old, and some for a transfer of a pre-syphilitic disease from the New World to the Old where a transformation then occurs. Silverman argues for this latter case based on the fact that closely related infectious agents such as with yaws or bejel are non-venereal, that is, they can be spread by non-sexual contact. He is a physician who was working in the jungles of Guyana when he came across a strange form of yaws; its transmission is by skin contact as usual for yaws, but the sores are like those of syphilis. He argues: "In this form, the bacteria could move easily through skin contact, because its hosts wore little clothing. But once the bacteria infected the more heavily clad European explorers […] it may have had to find a new route of transmission."[736] So because there was not so much skin to skin contact, it became sexually transmitted he argues. Armelagos, Zuckerman, and Harper, on the other hand, argue for the middle option, simple transfer of the already formed disease from the New World to Europe, etc. One piece of evidence they use to discount the first idea is lesions on bones, and they do not find that any pre-Columbian, Old World specimens "withstand scientific scrutiny."[737] In addition to this they state:

> It is clear that treponemal disease existed in the pre-Columbian New World; unmistakable skeletal lesions are found at sites throughout the Americas and they stretch back for thousands of years. […] These results, the lack of treponemal lesions in huge pre-Columbian European and North African samples, and the

[736] Carl Zimmer, "Isolated Tribe Gives Clues to the Origins of Syphilis," Science, New Series, 319, no. 5861 (Jan 18, 2008): 272.
[737] George J. Armelagos, Molly K. Zuckerman, and Kristin N. Harper, "The Science behind Pre-Columbian Evidence of Syphilis in Europe: Research by Documentary," *Evolutionary Anthropolgy*, 21 (March 2010): 50.

> sudden appearance of characteristic lesions in many of the same samples after 1493 all indicate that treponemal disease existed since ancient times in the New World, but appeared in Europe and Africa only after Columbus's return voyage.[738]

Treponemal is a reference to the genus of syphilis. This bacterium is known as *Treponema pallidum pallidum.* It differs from yaws only at the level of subspecies, yaws being *Treponema pallidum pertenue.* This team certainly knows the bacteria Silverman is referring to as Harper did the DNA sequencing on it. She found the variety of yaws he encountered in South America to be the closest relative to syphilis. Thus, Silverman may have found the point of divergence. Her team writes: "The results obtained by sequencing twenty-one different genetic regions, suggested that syphilis strains diverged more recently than their non-venereal relatives," by which they mean yaws and bejel.[739]

But what does that mean for us in South Asia? Though Armelagos, Zuckerman, and Harper acknowledge that the idea of a shift in the disease once it comes to the new world cannot yet entirely be ruled out, what is clear is that after 1493 Europe, Africa, and shortly thereafter, South Asia were faced with an unprecedented disease. The Portuguese were in India by 1498, as Talbot describes, when Vasco da Gama came to the Malabar coast.[740] Tension with Muslim ships and traders meant, though, that the Portuguese were not immediately able to settle in in the harbor areas. Nevertheless, she notes that by the 1570s, Portuguese priests who had settled in Goa were among the participants in religious discussions orchestrated by Akbar.[741] This shows that in less than a hundred years the Portuguese not only have a foothold in India, but are well established and integrated enough to be brought to what not long before was the enemy's table.[742]

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[738] Ibid., 54-55.
[739] Ibid.
[740] Asher and Talbot, *India before Europe* 79.
[741] Ibid 129.
[742] Note that this is within a few years of Shirazi's monograph on syphilis as mentioned in chapter 4. Based on the information above, it is most likely that syphilis was first introduced to South Asia by the Portuguese

And though groups often will place blame on other groups without good reason, it is telling that one of the Urdu names for this disease in South Asia is farangī: the European disease. Furthermore, the 1490s are well after Ibn Sina's death in 1037. This limits the date of our manuscript. It is written after the appearance of syphilis in India. Thus, these precepts are not a simple gleaning. The statement that Ibn Sina "wrote all these precepts in the fourth volume of his *Canon*" as seen at the close of the treatise cannot be true. What the translator tells us is unreliable, unless that 'all' is meant in another way. There may well be precepts similar to these seen in the *Canon* and in the *Complete Book of the Medical Art*, as, in fact, there are. And even more so, we find *similar* precepts in the writings of Razi. But identical precepts do not and could not exist. It is a book of medicine, but not from Hippocratic times or even from that of the Abbasid Caliphate in power in Baghdad.

THE NATURE OF SYMPTOM

Perhaps, though, Kantori does not mean 'all' in the way I take it, which is as a statement of identity. But could this set of precepts represent an 'all' in some other way, such as in a sense of completeness—these being all the *types* of statements on pustules needed? To try and answer this question, a closer look at symptom is needed. An overview of the clinical indications for each precept is given below in Table 1.

Table 1: Signs and Symptoms in the 25 Precepts.

Precept	Days to Demise	Outbreak Location	Positive at the Start	Positive, Other	Negative at Start	Negative, Other
1	13	Face			Itchy nose	
2	3	Knees			Sweat	
3	52	Neck				Thirst

at or shortly after 1498. However, this does not preclude the disease also traveling overland and entering by a Central Asian route as well.

4	That day	---			Eat warm things	
5	2	Fingers			Delirium	
6	6	Thumb, Toe left				Diarrhea
7	12	Middle Toe right			Eat spicy things	
8	4	Fingernails		Sneeze, yawn		
9	5	Neck		Urine		
10	7	Eyelid	Copious saliva			
11	1-2	Eyelid			Sleepiness	
12	3	Hand, right			No appetite	
13	25	Thigh, left		Itchiness, eat greens		
14	20	Ear, left	Urine			
15	24	Ear, left	Cold water			
16	7	Ear, right	Vomiting			
17	52	Chin			Phlegm	
18	5	Penis	Desire alcohol			
19	6	Side, right	Yawn			
20	25	Armpit/groin			Deep sleep	
21	28	Sole of foot	Cold air, cold food			
22	4	Temple, left	Itchy eyes			
23	9	Head	Eat melons, copious urine, drowsy			
24	90	Temple			Eat melons, drink water, much urine	
25	21	Neck, low	Eat sweets, bad food			

Table 1 (continued)

What is primary in each of the precepts is the location of the pustule, or pimple, or swelling. These are symptoms which are visual and are what are associated with fatality and the length of time until demise. For example, in the eight precept we read:

> When the fingernails would be a dark color and a pustule would arise in that shade of red of someone ashamed, one should know that this patient will die on day four from the start of the illness. And the indication of health in the case of this precept is that the patient would sneeze and yawn a great deal.

Color is the most typical descriptor, but size, shape, and texture may also be given. Only after this description do we find other types of symptoms, and these symptoms can be divided into two general categories, namely, things the patient does or feels and things which the patient possesses or which happen to him. Although what a patient desires and what happens to the patient may run together, such as in the case of itchiness. The patient might do the act of itching, or he might be described as being itchy. In precept twenty-three we see the condition a patient experiences being directly related to his actions:

> If a soft swelling arises on the center of someone's head which is like a walnut and is painless, one ought to know that this person will die on day nine from the day of the illness. The sign of health for this precept is that at the start of the illness, he would keep feeling drowsy and have a great desire to eat marsh-melon or watermelon, and so he will also produce a large amount of urine.

Here the patient has a desire to eat something watery and as a result of that action expels an increased amount of liquid. Drowsiness, like the expelling of urine is an involuntary state experience by the patient. Nevertheless, both of these secondary types of symptoms share the same role. While the state of the pustules links the illness to fatality, these others traits are what show up as mitigating factors. A particular kind of pustule is deadly unless there is sleepiness, or itchiness, or a desire for this or that food.

However, these non-visual indications are not always positive. They can also underscore the initial prognosis, such as in the first and second precept where these

conditions are prefixed by the words “especially if…” The patient will die and especially will die if these additional indications are seen. Delirium is one of the states associated with a negative prognosis, as seen in precept five. Yet, it needs to be emphasized that it is not a particular state or desire itself which is positive or negative but the composite symptoms. So, while the desire to eat melons and the urine that results is a positive sign in the example above, in the twenty-fourth precept these exact indications are negative.

It is also not the case that the mitigating factors are seen in the less acute cases and the exacerbating ones in the more acute, at least based on the days to demise. Positive signs are given in patients whose day of death ranges from 4 to 28 days, while negative ones are given from a range of that day until three months. It is worth noting that the average number of days to demise is just over two weeks. This accords with Arnold’s statement about smallpox patients generally passing away within two weeks. Given that smallpox is especially found on the face, the attention to ears and eyelids, etc. makes good sense. In fact, the general areas of the body are pretty much all covered: head, temple, face, ear, eyelid, neck; hands, fingers, nails; the side; armpit; groin, genitals; thigh; knees; sole of the foot, toes. Nevertheless, the body parts do not appear in any order as the precepts are laid out; that is, there is not a progression from top to bottom, or from big to little. There is also a range in the days until demise from within the current day to up to three months, but this, as well, is not presented in any order. Likewise, there seems to be no order or method associated with the supplementary symptoms, or a particular order for the whole. Or, if there is any kind of rhyme or reason to the sequence, it escapes me. It may simply be meant to be a list.

Still, even if it is merely a list with no overarching structure, there must be a reason for this list to exist. Why was there the desire to identify which cases might be fatal? Was something different being done in different cases? Since we have no treatment information here, we can only speculate as to why the division was made. And, as mentioned earlier, the total lack of treatment recommendations is remarkable. Even Razi's list of fatal types of measles and smallpox starts out with general treatment recommendations and erupts into advice along the way. Education was mentioned as a purpose for publishing these precepts. And the idea that they might be written for memorization, whenever they were written, is supported by the truly simple, stark, and repetitive language. Urdu is a rich and poetic tongue, but no euphemisms or metaphors are used to describe the patient's meeting with death. Every single precept sticks to *mar jāe gā*, he will die, like a refrain. The word *ziyādah* is used twenty-three times. In a profession where hakim after hakim was known to be a poet, the bareness of the language is striking.

One could attempt to argue that this treatise, though not stretching back to before the common era or even to the start of the first millennium, might have been written in Arabic sometime between the arrival of syphilis to the Old World and the date of this translation, and that this is why the language is so stiff. But even if that were the case, the translation would not need to be so rigid; he will die could be expressed in a variety of ways. Attewell, Alavi, Arnold, and Sivaramakrishan all discuss internal and/or external pressures on Unani during the 1800s, several of which are likely to be relevant here. Arnold, for example, describes how the British in India who were initially less than hostile to local healing traditions reacted to a series of epidemics, and most especially to

the bubonic plague, with new degrees of "interventionism."[743] A shortage of doctors led to a period of duel training in Western medicine and traditional medicine post 1850. As Sivaramakrishnan points out, there was a move to "naturalise western scientific learning" and "to introduce its rational-critical method in Indian society."[744] This treatise is just one tiny bit of written work, but it could be argued that that is precisely what is going on in this case. The clipped language, for example, might be conceived of as more rational.[745] In addition to this, there was a period when there was a desire to teach Western science via local languages, such as at Punjab University College. As Sivaramakrishnan writes, this is when vaids and hakims came to be associated with particular vernacular languages; Urdu became the language of Unani.[746] This training of hakims for government service ended in 1889; the very year the *Grave Treatise* was first published.[747] But there were educational efforts that aimed to teach Unani and Ayurveda in their "own" languages, requiring the development of curriculum in languages their students could read. One could imagine that the drive to create a curriculum could also lead to bite-sized works such as the *Qabriya.* It is something students who were not necessarily raised with the subject, or even Urdu as a first language, could digest and memorize. All factors considered, then, it seems likely that this work is an original creation of these times and given a historical lineage to create legitimacy.

The events of the 1800s might also help us to understand why this particular treatise would be created. Epidemics of cholera, smallpox, and plague were rampant. The

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[743] Arnold, 203.
[744] Sivaramakrishnan, Kavita, *Old Potions, New Bottles: Recasting Indigenous Medicine in Colonial Punjab (1850-1945)*, New Perspectives in South Asian History 12, New Delhi: Orient Longman, 2006, 5.
[745] It might be worth noting that Kantori's translation of the *Canon* is of an entirely different style. The language is fluid and expressive.
[746] Sivaramakrihnan, 28.
[747] Attewell, 103.

"several million deaths" from smallpox had the company of high death rates from other diseases and from periodic famines. Cholera deaths between 1887-1891, for example, reached over 400,000 in British India.[748] Bubonic Plague was a new disease in India and inspired many treatises.[749] Likewise, one can see how the somewhat new disease of syphilis might call for clarification in times of numerous disease outbreaks. Though no treatment advice is given in the *Qabriya*, when vast numbers of people are dying, it is understandable that a physician might want to know who he is most likely to lose and who he is not. This would allow him to prioritize patients. This treatise, therefore, even in its silence about what to do for whom, might express something about an approach to death. Save those you can. In times of epidemics with high death rates, it is also entirely understandable how a treatise on fatal manifestations of disease could be called grave.

[748] David Arnold, 164. Plague begins to be a factor right at the end of the 19th century, but really peaks only after the turn of the century.
[749] Sivaramakrishnan, 70.

Chapter 7: Conclusion

Listen! You can hear the grating roar
Of pebbles which the waves draw back, and fling,
At their return, up the high strand,
Begin, and cease, and then again begin,
With tremulous cadence slow, and bring
The eternal note of sadness in.[750]

I began this dissertation with the image of a wave and Matthew Arnold's melancholy description of the grating of stone on stone when the tide comes in. Return may evoke sadness in ways that are significant to a conclusion. For one thing a return does is to signify that *this* is not *that*: there is a past which is recognized by similitude. The very closeness of an event, a layering of images not identically lined up, recalls what is lost—some space between this contour and the previous contour, an irretrievable gap. However, the happier implication of this fact is that return allows comparison and return allows depth. Precisely because the present is a bit askew, it allows us to see more clearly. It makes the past something we can learn from.

So now is the time to look back at where we have been and to see what can be fruitfully drawn from the journey. The motivation for the study was an aging population and increasing concerns about end-of-life care, both in the West and in South Asia. The research question was small and concrete, but opened into less tangible ones. That is, the simplest form of the question has been this: What are the medical approaches to death in these two traditions; what actions are taken or not taken in respect to the dying? This question implicates others, namely, how is the decision made that a given patient is dying, what categories or symptoms prove to be defining? Then, what is seen to lead to death brings up the question and is often tangled with the question of the nature of death. What specifically signifies the individual has irreversibly crossed a boundary? Another

[750] Matthew Arnold, "Dover Beach," 612.

way to phrase this question is to ask what dies—what ceases that was present just beforehand?

The source materials for the dissertation have now become familiar through the individual chapters on each respectively. On the ayurvedic side of the equation, we encountered the *Carakasaṃhitā* (Chapter 3) and the *Kālajñāna (*Chapter 4); and on the unani side the *Tarjamah Qānūn Sheiḵh Bū ʻAlī Sīnā* (Chapter 5) and the *Risālah Qabriya* (Chapter 6). Recall that the intent was to look at one broad, foundational text and one more narrowly focused treatise from each tradition. The method employed is broadly philological, as described in Chapter One, with the intent of drawing from rather than imposing ideas on the texts. This involved identifying every mention of certain concepts and translating relevant passages, or, in the case of the shorter texts, translating the whole of the work. Equivalents of the terms death, die, dying, dead, longevity, lifespan, preservation (of life), curability, treatability, manageability, and fatal were examined. From this an aggregate understanding of the meaning of death, its indications, and the resulting medical approaches was determined. Areas of contrast and overlap via identifying common themes across the traditions will be considered below.

THE FINDINGS

A major parallel across the traditions is the recognition of two broad categories of death. In Ayurveda these are designated as untimely and timely deaths, while in Unani these are called unnatural and natural deaths. In English, avoidable and unavoidable death might best capture the sense of the division being made. It is a useful division for us in that it reveals understandings about the underlying cause of death, of what it means to die, as well as conceptions of lifespan. In spite of the similarity of the overarching categories, the understandings revealed differ substantially.

In Ayurveda, untimely death begins to show us the frequency with which loss of life is described in terms of loss of breath. The cessation of breath becomes an equivalent term to "to die" and is the descriptor most frequently used to convey this transition. Breath is the underlying and ultimate cause. The inevitability of death, however, is conveyed without reference to breath. Instead, we see an analogy to time; what begins, and moves, must end. One gets the sense of an unfolding. On the other hand, a metaphor we are given to explain the difference between untimely and timely death is a wagon. Those who overload their carriage might break an axle or otherwise cause its early demise. But the image works well in other respects as well. It conveys the sense of the body as a carriage that holds rather than *is* life. This echoes the concept of physical constituents which are bound together and disperse again into simple elements at death. A dead body is but material, and material rapidly disassociating. This dissociation is perceptible via symptoms associated with the sense faculties in one who is in the process of dying. The image also conveys the sense of death as the end of the natural "life expectancy" of the component parts; you can only put so many miles on an axle, even if you take the best care of it. Furthermore, this suggests the possibility of using replacement parts. We do not see this in the piecemeal manner of today: here a new knee, there a heart-valve. Rather we see it in the rejuvenation therapies which at their extreme describe a complete breaking down and refurbishing of the body from skin to bones—a rebirth without leaving home. The vehicle gets taken apart and replaced *in situ*.

Nevertheless, this reveals a tension with the previously stated analogy between life and time. How does the possibility of replacement square with the conviction that death is inherent in life? Is refurbishing seen as resetting the clock? And how many times could one do such a thing? This brings us back to the meditation on death found in Holmes's carriage which was built to last a hundred years. Given that medically we have

increasing ability to replace our own parts, albeit piecemeal, how do we want to construct our bodies? Ideally, do we want to construct ourselves so that we "burst like a bubble," all the parts going out at once? Or do we imagine there is the possibility for endless rebuilds? What do we gain or lose by considering this physical apparatus as vehicle and life as passenger?

What coincides with the idea of life as a vehicle is the ayurvedic concept of lifespan. There is, as we have seen, an ideal of a hundred years, and even though not everyone is seen to arrive at that final day, there is some suggestion that a few may go beyond it (such as is suggested in various rejuvenation protocols). Lifespan is movable, and significantly, it is affected by religious practice and medicine. One's actions, moral or immoral, become the way one uses the cart. In the first case life is supported, while in the second it is shortened. Furthermore, it impacts who gets treated, the severity and presence of illness, and even the effectiveness of remedies. Medicine gains status in that it helps one to continue to have the opportunity to do one's moral duties. Therefore, for both medicine and religion a fixed lifespan is intolerable, not so much based on the fact that we see differences among individuals in this respect, but because such an idea would render both medicine and religion useless. If one had a certain span to live and only that, no more and no less, drugs and therapies could make no difference and mantras and rituals would not be seen as effective in changing one's initial fate. Bad karma could not be associated with a bad prognosis, nor good karma be seen as effecting a change.

Unani shares the division into avoidable and unavoidable deaths and struggles with this question of fixed lifespan as well, but for different reasons. It does not need to work karma into the world of medicine, but it does have to grapple with the idea of every single life as being "particular" as decreed by God. However, a simply and absolutely preset lifespan undercuts the usefulness of medicine. Thus, an inherent tension exists.

This is resolved in part by stating that each individual lifespan is set as an upper limit, but that actions of an individual may cause it to be shortened. And whereas breath was the final cause within Ayurveda, here temperature is seen as the determinative factor. Breath and pulse do get tied to temperature, but in an unnatural death we typically see that diseases or injuries lead ultimately to loss of heat, and that loss of heat as being equivalent to death. Breath and pulse are contributing rather than final factors.

An image used by the Q helps to distinguish the difference between unnatural and natural death as seen in Unani. Both types of death are ultimately due to a loss of heat. But while various factors can lead to that in an unnatural death, a particular factor leads to it in natural death. So, to revisit the image, it is that of a lamp and, moreover, a lamp with a reservoir of a particular size. This reservoir is one's unique temperament, which impacts how quickly the fuel may or may not be used up. Certain procedures can be used to partially refill the basin, but these can never entirely replenish what has been lost. Death is inescapable because life is a process which can only be partly supported. There are no replacement parts. When the oil in the lamp is used up, this lack of moisture causes the flame to go out, i.e., it causes the loss of heat. Therefore, in a natural death, loss of moisture drives to loss of heat. Death is cold.

It is worth noting that this image and the understanding of death that surrounds it has different implications than the metaphor of a wagon. Life is not separate from the lamp. One cannot imagine the flame hovering in equipoise above a lamp that is entirely dissembled and reassembled below it. With this image, it is difficult to hold the idea of perpetually continued extension, and the benefits of moderation, of not using up one's resources too quickly, become apparent.

The place of breath in each of these traditions is worth pointing out in light of Wujastyk's suggestion of the humors of Ayurveda being a 2+1 system, with the wind

humor (breath) coming in from beyond the original conception of a pair. The Unani model is also in a sense a 2+1 model as we have seen it unfold. We have two gradients which intersect, that of moisture and of temperature. One could correlate these with the humors of phlegm and bile, respectively. Breath has a relation, but not overtly; it comes in as a factor impacting temperature, but by no means the only factor. Loss of heat is ultimately more important than breath as the cause of death. What differs between Ayurveda and Unani in this respect, then, is primarily the way the two gradients are seen to interact. In Unani, the way the gradients interact allow a sort of negative and positive area and the concept of balance. The relationship in Ayurveda is more susceptible to a positive concept alone, and, being less linear, remains less settled, more dynamic. This may or may not be related to the different kinds of nosological categories that develop. Further focused work could help illuminate this question.

In Ayurveda, we encounter broad disease categories, but it is generally the subcategories of these diseases that are associated with particular treatments. And often the number of humors involved is related to the specific subcategories of a disease, with the increasing number of humors not merely setting off a different type but indicating increasing severity as well. Still, the humors in and of themselves are not generally what are treated. That is, there is not a blanket treatment for any disease in which the bile humor is affected, rather it is based on a combination of humor-type and disease-type. And it is this combination which leads to the most important categorization in this medicine in so far as we are concerned, for where an illness falls along a hierarchy of severity impacts whether it gets treated at all.

Unani does recognize diseases which are easier versus more difficult to treat. But the manner in which this category is formed in Ayurveda leads to a vastly different plan of action based on disease severity. So, while Unani recognizes differences in treatment,

Ayurveda goes further and breaks diseases, or disease types, into curable and incurable. As we have seen, that division is sometimes described as fourfold and sometimes as threefold. Curable and incurable may be subdivided into those which are more difficult and easier to work with. However, that leads to somewhat of a logical problem when one tries to conceive of an easy-to-cure incurable disease. Furthermore, functionally what appears more often is a division into curable, something like manageable, and incurable. The categorization is further complicated by the fact that these manageable diseases originally appear under the incurable heading. These ambiguities aside, the frequent and emphatic recommendation in Ayurveda is not to treat those who are incurable.

We saw that a number of reasons are given for why the incurable should not be treated, many of which relate to the physician's self-interest. However, a close examination of the texts indicates that efficacy might be the primary underlying factor. And, indeed, a medicine which is not reluctant to give up a patient would find it easier to acknowledge where its efficacy comes to an end. The two concepts are tied at their roots. A patient who is incurable is one for whom medicine cannot retrieve health. By definition, it cannot succeed. Thus, this recognition that incurable patients should not be treated supports medicine in recognizing its own limitations. Another thing this category, which comes with its own action plan, may bring to mind is the difficulty of carrying out decisions we deem to be correct. The constant admonishments not to treat those who are incurable points to the fact that even when a patient falls within a firm category, it can be difficult to execute what is seen as best. Physicians were seen to try to slip away without informing the family of a bad prognosis so as to avoid being drawn into treating a patient when no effective treatments existed. It seems worth acknowledging that this might not be any easier today than it was two thousand years ago. There is the concept of what should be done, and there are pressures acting upon that. Simply recognizing the

difficulty involved helps to support the original decision and to clarify the nature of the counter pressure.

Unani varies widely here. It makes no stand against treating those who are dying. It does not recognize a category of incurable diseases. Part of this has to do with its conception of disease. But, the concept of treatability also involves a number of factors beyond disease type, such as the availability and/or appropriateness of medicines. Appropriateness means the age or strength of a patient, and availability is self-evident. However, temperament also plays a part and ends up reducing the importance of disease categories given that two individuals with the same disease might require quite different treatment. First and foremost, it is an individual who is treated, not a disease catergory. Someone who tends to the hot and dry would require different handling than someone who runs cold and damp when each has an identical disease. The concept of temperaments along with the sense of the possibility of balance leads to a cautious use of medicine in general. It is as though one is adding weight to one pan of a delicate balance scale; one does not want to unduly disrupt the mechanism by overshooting and further disturbing the equilibrium sought. A scale, so suitable to the idea of these intersecting quantities of qualities, may be where the sense of the body as being able to self-equilibrate comes from.

But, in Unani, the greatest impact on medical treatment in relation to the dying has to do with the concept of crisis. As in Ayurveda, there is a sense of time as relevant in relation to disease. That is, there are times when it is best to be treated, and times when certain diseases are likely to make their appearance. Seasonality in relation to disease allows the beginning of the concept of preventive medicine, of capturing the pot before it falls. And in both medicines, every person is a potential patient at all times due to this. In Unani if a certain disease appears in a certain season, *and* the body acts like a precision

scale, one can begin treating for a predicted distortion before it actually appears. This is similar to the preemptive act of preventing a fall, but here it is more finely tuned. Today we may also take vitamin C at the start of the flu season rather than at the start of a cold, or begin to put local honey in our tea prior to the onset of allergy season. However, Unani does not restrict itself to getting an early start on diseases, it sees various periods within that trajectory as better and worse for applying treatments. Involved in this is the idea of the body's ability to self-correct, plus an idea of not burdening the body with other things to integrate at crucial periods. In addition, there is the thought that diseases are more or less vulnerable in certain periods.

Out of this grows the idea of an hour of struggle, a period when the body needs to be most actively engaged: the crisis point. The implication in an hour of struggle, however, is that the battle can go either way. A patient might live, or a patient might die. This is not predeterminable; therefore, various categories of patient with various treatment plans is not something that comes about. What this causes in Unani medicine, coupled with its original caution about the use of medicines, is a treatment plan that considers two forks in one road. Treatment is given as if the patient is about to die, so any and all desperate measure might be used, *and* as if the patient is sure to live and damage to that ongoing life is to be avoided. These two, in sum, lead to a more cautious care at the same time as leading to more sustained care. A particular patient is not to be given up on because the end is not known. Thus, we see dying infants gently treated. This understanding paired with Unani's understanding that pain in and of itself can lead to death, begins to approach something like comfort care.

And with the focus on the role of pain, we are brought back to Wujastyk's observations in relation to Buddhism and medicine. Earlier we saw that Wujastyk found evidence of a well-developed theory of medicine implied in a Pali story where the

Buddha lists various causes of pain. Wujastyk finds there, among other things, the eight factors which become the basis of Ayurvedic nosology. What is interesting to us here is that very little discussion of pain continues into the CS; this specific concern takes a back seat. However, it has a fundamental role in Unani. One possibility is that this is a thread from the period of that original concern, enduring in the northwest region of South Asia and finding its way, unbroken, into this Central Asian expression of medicine. An exploration of pain in early Greek works would be fruitful in this regard as a point of comparison.

But coming back to the idea of a counterbalancing of medicine due to considering multiple outcomes at once, such a considering of both possibilities, of both branches, might lead to a profitable caution in our current medicine. Or, at the least, it might lead to a greater acknowledgment of the possible harms done. Certain treatments for cancers lead to what we call secondary leukemias. These are nothing less than treatment-caused disease, intractable and often fatal. A more cautious medicine might coin a name that does not obscure the cause of this illness, and with a name which carries an inbuilt warning, more caution might be taken in using such a treatment in the first place. It is not that one would necessarily choose never to use it, but the implications of such a decision would be in plain sight.

The greatest divergence we see in these two medical traditions, therefore, is the prescribed manner of treating those who are dying. A concern for efficacy is seen in the Ayurvedic tradition, for example, whenever a serious disease has three humors involved, the treatment options are typically seen as mutually contradictory. This leads to a medical silence, and reluctance to share the understanding of the prognosis when nothing positive can be done. This silence reminds us of the one which has been so criticized in the West, but which may be seen to have grown out of more general, cultural attitudes towards

death and how it should be approached. There was a time our culture wished to have nothing overtly said in respect to an impending death. The topic was taboo. But our medicine appears to have lingered longer in this stance than the general population. The topic is no longer taboo, and death is being discussed everywhere. This marks a significant shift in our attitude toward death, and I would suggest that this is tied to a combination of the increasing financial cost of medical care, an increasingly aging population who are facing death, and the most recent change in the trajectory of death. Once the bumpy road of decline, in which dramatic recoveries could follow dramatic downturns, was smoothed out, the angle of incline became more revealing. Now when decline begins, the direction is indisputably toward death. We cannot help but see that fact.

It is of particular interest, given that this dissertation has its roots in South Asia but speaks also to questions of the handling of death and dying in the West, to note that a number of voices who are shepherding us towards our new attitude toward death are South Asian. Gawande has been mentioned above. There is also the well-known book by Kalanithi, *When Breath becomes Air*, and more recently Mangalik's *Dealing with Doctor's Denial and Death.* This may mark not only the influence of an influx of South Asians or those with South Asian roots into American medicine, but also a readiness on the part of the existing medical milieu to find a new way. This may be very much a mutual meeting and expression of new truths.

Physicians, though, may not be the only ones forming this new attitude. Pharmaceutical companies may act not only as bellwethers in regard to a new attitudinal direction but may also influence that direction. For example, we have seen the explosion of "right to try" legislation forefront patient access to new medicines at the same time as allowing these new treatments to be put into the marketplace much sooner than would

otherwise be possible for those companies. But we have also seen that exotic, expensive drugs as a mark of prestige is nothing new, nor is the idea of risks associated with new medicines or therapies.

Both of these age-old medical traditions share a strong sense of the risks involved in medicine. Where they differ, however, is where they tend to locate that risk. In Ayurveda, the ignorance of the physician is blamed repeatedly for bad patient outcomes, and the need for proper training is thus endorsed. The patient is also seen as responsible for failed treatments either based on factors that are moral in nature or based on general fitness. A weak individual cannot endure strong medicines. For the most part, the medicine itself is not faulted. Atreya, as we have seen, argues that a curable disease given the proper remedy cannot but be cured; cause and effect must remain tightly linked. Thus, the fault does not fall on the medicine itself.

In Unani, the strength of medicines in relation to patient strength is likewise an important factor. Bodily resources are leveraged to return to health, and when there is not much to leverage, not much can be done. However, in this medical tradition, the medicine itself takes far more blame. Physician ignorance or incompetence is hardly mentioned. Active agents are seen in sentences that illustrate procedures correctly carried out, but passives appear when an error is made. This may reflect a different audience for these medical treatises, and perhaps also tighter control on who may be called a physician. But this is a medicine that is cautious about the use of medications. Furthermore, in descriptions of procedures, it is taken for granted that errors will occur and that treatments can and do cause further health issues, many of an immediate and serious nature. One has to wonder if this is not a reflection of “new technologies” and the discovery of stronger forms of medications. Bleeding a patient with a leech, for example, naturally reaches a stopping point, but use of a lance could more easily lead to a fatal

excess of blood loss. However, this caution might also grow out of the conception of health and illness in the medicine. If the body is seen as a precision scale, one that trembles and waivers for a time with each addition of weight, then anything added or subtracted would want to be done slowly and gently. The body may be able to find its own equilibrium, but balance is a delicate thing. Unani returns us to health by recompense, so it may be an algebra of medicine, and Ayurveda grapples with perpetually changing, shifting intervals, so it is a calculus of medicine. But both have things to teach us about handling patients today and in particular in considering decisions surrounding the care of the dying. And perhaps, most useful of all, they teach us that we are all forever patients: everything we eat and drink impacts our health. First and foremost, we are under our own care. To eat enough, but not too much, to get exercise regularly as we are able, and to sleep in moderation are all still part of medical recommendations. So where do we go from here?

LIMITATIONS OF THE STUDY AND FUTURE WORK

This dissertation is just the beginning of an examination of the nature of death and approaches to death in the medical writings of South Asia. An extremely limited number of texts were used. However, given that this is the first study of its kind, it makes an adequate beginning. The CS and Q are among the most important texts to their relative traditions, so are a logical place to start. However, something that would add immediate value to the study would be to bring in Cakrapāṇidatta's commentary, the *AyurvedaDīpikā* which, as described in the introduction, would act as a bridge between these two foundational texts, triangulating them by means of time period and language.

Furthermore, a critical edition of neither the CS nor the KJ currently exists. In the former case, that is a monumental project and is being undertaken at the University of

Vienna. However, as it will still be a long while before that is completed, it is still worthwhile to garner as much information as possible from the available editions. A critical edition of the KJ, on the other hand, being of a much smaller scale, could be produced in a reasonable amount of time. Toward that end, I have been gathering manuscripts and hope to make that a project in the near future.

A further limitation in this study is my lack of knowledge of the Arabic language. The use of the Urdu text has been described earlier as an attempt to further locate the medical view within a South Asian eye. However, study of Arabic would be requisite for a deeper exploration of the Unani medical tradition, and I hope to study this language in the near future as well.

Finally, I have found the words of the Urdu poets quoted in the text to enrich my understanding of these medicines and what is a stake in the decisions we make. Though I certainly have not been able to convey their full beauty and power, I hope to spend some time in the future working on translations of this South Asian poetry and to attempt to give it its due. For if life is heat and breath, these both are certainly found in vibrant verses—exhalations imbued with the core of our being. Perhaps that is why so many hakims were both physician and poet.

APPENDICES

Appendix A: The *Kālajñāna*

THE TREATISE

Any variation in thoughts about medicine from the CS to the KJ should be of no surprise as this treatise appears to come into being sometime around a millennium and a half after the CS. Starting with place before time, though, the evidence suggests a likely northwest origin. First of all, though we do not know where the KJ was first produced, we do know where copies of the treatise were located at the time of the production of the *New Catalogus Catalogorum* (NCC). This catalogue has six listings for a medical text of this name, and these can be found from as far south as Trivandrum to as far north as Jammu and Kashmir. They span the continent from Kolkata in the east to Mumbai in the west. Nevertheless, approximately half of the known manuscripts were concentrated at the time of the NCC in the northwest region of Rajasthan with several nearby in Lahore.[751]

Other evidence supports a northwestern origin as well. There is slippage, for example, of palatal ś to dental s, albeit inconsistently. Thus, we find both *vinasyati* and *vinaśyati* in the sense of 'to perish, to be destroyed.'[752] Of course, √nas exists as a verbal root with the meanings of 'to be crooked or to bend', so one might want to imagine vi√nas as working in that context to mean 'bend down' as if with the weight of time. But √nas is a first class verb which, furthermore, takes the ātmanepada voice (meaning there would be no y found in indicative and that the ending would be the -ate of the middle

[751] V. Raghavan, *New Catalogus Catalogorum: An Alphabetical Register of Sanskrit and Allied Works*, Madrass: Rathnam Press, 1968. Twenty-five out of fifty-three mss present in the subcontinent are found in this general region.

[752] See, for example, verse three, lines 4-5, where both variations appear, though one in the singular and one plural.

voice.)[753] Jamison identifies a trend toward homogenization of types of Ss in Middle Indic languages where ś and ṣ go to s in the west and ṣ and s towards ś, in the east.[754] One can imagine such a trend occurring in vernacular languages of the region having an impact upon some Sanskrit texts.

Further evidence revolves around a graphic flourish present at the beginning of the manuscript which has been primarily, though by no means exclusively, associated with Jains. Bhattacharya has done an in-depth study of the symbol, pointing out that "this [*bhale*] symbol invariably occurs at the beginning of the Jain manuscripts from Gujarat and Rajasthan."[755] Tripathi associates it particularly with Śvetāmbaras in his *Catalogue of Jain Manuscripts*.[756] Nevertheless, Bhattacharya does go on to say that this was used by Hindus and Buddhists as well, with the earliest example he cites coming from a Buddhist stone image in 448 CE.[757] Still, the Gujarat and Rajasthan association is noteworthy given the main, recent locations of the KJ.

This symbol is useful not only in situating the treatise but also in giving supporting information for dating. The *bhale* symbol starts out with two elements, and only later has three, as is seen in our manuscript. Bhattacharya points out that three elements are not seen earlier than the tenth century, and that from the ninth century on the first elements shifts away from opening to the left to opening to the right.[758] Ours, likewise, opens to the right. Bhattacharya gives an example that dates from Saṃvat 1698 (1641 CE), just five years after ours at Saṃvat 1693 (1635-1636 CE).[759] As he states, this

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[753] Whitney, *The Roots, Verb-forms and Primary Derivatives,* 89. Monier-Williams, 474.
[754] Jamison, "Middle Indic," 36.
[755] Bhattacharya, "The *Bhale* Symbol of the Jainas," 201.
[756] Tripathi, 39.
[757] Ibid., 205.
[758] Tripathi, 207 and 206.
[759] Robert Sewell, and Sankara Balkrishna Dikshit, *The Indian Calendar,* Delhi: Motilal Banarasidass, 1995, lxxxiv.

is an instance of the "developed form" of the symbol which includes all three elements.[760] A comparison with his Plate XXIII shows an excellent likeness.[761] Most importantly, however, is that Bhattacharya notes that this particular type of symbol "was never used in Eastern India."[762] Thus, while we do not have an exact area of origin for the treatise, we have a likely region for it, and, certainly, a good sense of where this manuscript was produced.

As for dating the treatise we gain a terminal date on the manuscript itself that conforms with extra-textual sources. This was not composed later than 1636 when our copy was written; how much earlier it might have originally been composed remains to be seen. It is this early and clear date which, in part, influenced my decision to begin working with this particular manuscript. It was among those few located outside of the subcontinent at the time of the NCC, coming from the Staatsbibliotek zu Berlin.

There is one last date worth noting in conjunction with determining the *terminus ad quem*, and that comes from the NCC under entry #13 for the KJ. One holding at the Anup Sanskrit Library at Fort Bikaner is dated 1612 AD. This would be a date worth confirming, for if that were actually a Saṃvat date, this would push the limit for this treatise back to ~1555 CE![763] However, for the moment we hover at 1612. The content of the text which mentions a particular disease along with recent genetic studies pertaining to that disease can help us with the *terminus a quo*, or at least if we take the treatise as a whole composed at a single point in time—which cannot at this point be determined with certainty. Why this disease and these dates matter in terms of this dissertation is that, though both the KJ and Q turn out to be younger texts than expected, they nevertheless

[760] Tripathi, 212.
[761] Ibid., 228.
[762] Ibid., 212.
[763] The date listed for our ms in catalogues is the Samvat date, so this seems to be a real possibility.

still make an appropriate parallel. The discussion begun here will be continued in Chapter 6.

The verse at lines 77-78 contains the relevant word in respect to this disease: *phuliṅga.* Monier-Williams (MW), 1872, defines this as syphilis and refers to the more commonly used *phiraṅga*.[764] Possibly, this was seen as a difference of the liquids r and l, these influencing the surrounding vowels. As Jamison notes, again in regard to Middle Indic languages, "the two liquids merge, with *l* the usual Eastern product, *r* the Western."[765] One could try to imagine, then, these two terms as eastern and western expression with the consonant shift affecting the vowels of choice. However, there are several problems with such an idea, not the least of which is that our text otherwise appears to be a product of the west.

What else do we know about these words, and does that help? The primary meaning of *phiraṅga* is the country of the Franks with *phiraṅg* and Frank bearing an obvious phonetic resemblance. Secondarily, it comes to mean the disease of the Franks (Europeans) or syphilis, as per MW 1872. MW 1899 gives only the meaning of the people or their country under *phiraṅga*, while it gives *phiraṅga-āmaya* as the disease of the Franks, syphilis—the latter word in the compound meaning precisely damage, disease, or indigestion.[766] It is in this edition that additional information is given with *phuliṅga*: Cat. for catalogue. Thus, it does not seem to have been encountered in the literature of the language in general.

A search of the word at the Deccan College Scriptorium supports this idea. The holdings of this Sanskrit dictionary project are drawn from various genres ranging in time

[764] MW 1872, 671.
[765] Jamison, 36.
[766] MW 1899, 718.

from the Ṛg Veda up to 1850. What is found there are two slips of paper with no time period or date indicated and no title of a Sanskrit work. Furthermore, no meaning for the word is given. The first slip has Aufrecht written on it, the second has something which looks like Verzd. Oxf. H. Aufrecht's cataloging work is well known, though this must have been added somewhat after 1850. Aufrecht catalogued the holdings of the Bodleian Library and launched the Catalogus Catalogorum. Both these slips may well refer to his work.

What does it mean, then, that we find this word in our manuscript? Could it just be a scribal error? It appears in this same form in two other manuscripts that follow this one to a fair extent. These each come from the holdings of the Bhandarkar Oriental Research Institute (BORI) in Pune, #454 and #619. These share the same catalogue entry in NCC as does the Chambers (Chambers being the name associated with our manuscript and coming from its collection history.) It is also worth noting that, though the vocable on these two slips is *phuliṅga,* the Aufrecht slip has written on it, in the box where the title of a work usually goes: = *sphuliṅga.* MW 1899 notes that, according to lexicographers, this latter masculine noun can also be feminine or neuter and that they think it perhaps comes from *sphulaṃ-ga*. Its meaning is a spark of fire as found in the *Mahābhārata, Rāmāyaṇa* and so forth. Per MW 1899, it also means a fire-brand as seen in *Āpastamba's Śrautasūtra*.[767] MW 1872 suggests that *sphuliṅga* might be related to *sphut* which is related to *phut/ phūt*, each being onomatopoetic sounds associated with the crackling of fire.[768] What is interesting here is the association of the word with fire. An Urdu word for the disease also stems from fire, *ātishak,* coming from *ātish* (this latter

[767] MW 1899, 1271.

[768] *Phut* appears in our ms at line 69 as a sound which those who have the nature of fire make, along with a statement that those who have a great cause for burning will die.

comes from Persian where the word also means fire. Ātish is also the name of the late eighteenth-century poet whose verse appears at the start of this chapter and who often plays on the sense of fire carried in his name.)

This brings us to the last reference to *phuliṅga* found at the scriptorium. It has a citation, a text name, a meaning, and a date. The meaning is spark and the date given is 678 CE. The text is the *Padmapurāṇa*, a Jain treatise which is a variant telling of the *Rāmāyaṇa.* This would make syphilis a disease of fire, either due to the passion involved, or the fiery red of the initial chancre, or the extensive red papules of rash which may follow, or all of the above. Was this an early name for the disease that did not catch on? Was it meant to be a translation of *ātishak?* Or possibly vice versa? Reddy argues that Unani physicians saw syphilis as coming out of the northwest and gives the example of Shirazi's monograph on syphilis written in Persian in northeast Iran which uses the term *ātishak.*[769] Reddy gives this treatise as coming soon after 950 AH (1543 or 1544 CE). In fact, it was written in 1569, and Savage-Smith, referring to the original manuscript, cites this as an example of Islam's declining medical prowess; she considers it an example of European medical influence because Shirazi "followed the European practice of advocating for its treatment [syphilis] the use of China root."[770] What matters for us less than the actual direction of influence is that this locates the disease in an area bordering upon the northwestern region of the subcontinent by 1569. (Our text is nearly 70 years later. Though one KJ manuscript is just about 40 years later. However, it is not yet confirmed whether or not this particular verse on syphilis is found in that earlier

[769] Reddy, *Antiquity of Syphilis (Veneral Diseases) in India,* 129. Reddy does not seem to consider the tight trading ties of the Muslims ranging from the Malabar coast to Central Asia and beyond. Varthema, as we see, travels easily all across the Muslim world.

[770] Savage-Smith, *Islamic Culture and the Medical Arts*, 57. Note Dagmar Wujastyk shows China root was used in ayurvedic medicine in the 16th century in her "Mercury as an Antisyphilitic in Ayurvedic Medicine," 1049. See also 1057-1064 for a discussion of similarities and differences in treatment of syphilis in European, Arabic, and Indian medicines.

manuscript.) Reddy reports that Shiraz describes the disease as being of recent origin. He also relates the idea of the disease being introduced by the Portuguese and admits that "medical historians of India and Ayurvedic scholars of the last 50 years have also maintained this view of the Portuguese importation of the disease."[771] However, he is not immediately ready to accept the idea of the disease as a new introduction. Reddy mentions a translator of the CS, for instance, who uses the term syphilis and draws on other descriptions, trying to argue that these may point to an earlier presence of the disease: "These widely scattered and somewhat crude statements give, when collected together, a fair outline of a picture suggestive of syphilis."[772] He thinks descriptions of the disease may have been around long before the name, ultimately wondering whether there was some milder form of syphilis present in India deep into antiquity which then simply saw a change in virulence. Others have argued for this to have been the case with the disease in Europe as well—that is, they argue it was not an import but rather a shift occurring in an already present illness. In chapter 6, where we get a more in-depth description of disease symptoms in general and for syphilis in particular, recent genetic studies will be examined which deal with the development of this illness and which will dispel this idea. These studies show a new arrival on the shores of Europe, Africa, and Asia, not a change in an already occurring disease. This, then, means the disease is useful for dating.

However, before moving on, it is worth noting that the Italian traveler Ludovico di Varthema records another Indian name for this disease. Having tried to attain safe passage with the Portuguese for two rogue Italians (who had come over with the Portuguese) in Calicut, who do not make it to safety, he recounts this event in his

[771] Reddy, *Antiquity of Syphilis*, 110.
[772] Ibid., 117.

memoirs. He had encouraged them to leave behind their wives, sons, and slaves, and to come alone, traveling light. They do not heed him, signaling their intentions, and are killed by a mob. But Varthema meets the wife of one of these men, and purchases his son…

> …and had him baptized on St. Lawrence's day, and gave him the name Lorenzo because I baptized him on that same day, and at the end of a year on that same day he died of the French disease. You must know that I have seen this disease three thousand miles beyond Calicut, and it is called *pua*, and they say it is about seventeen years since it began, and is much worse than ours.[773]

At first it might not be clear that the name is the local one, not the name from 3,000 miles away. However, a footnote on the term clarifies the matter. It states that the word is "probably from Sanscrit *pūya,* matter from an ulcer. Varthema's remark on the recent appearance of the disease would imply that it was introduced into India by the Portuguese."[774] Travelogues are not always known for their veracity. For example, we might prefer to translate *pūya* as pus rather than ulcer. Nevertheless, amidst the details several things are apparent here. The wives of these men are not European. And even at this early date (from a few pages earlier, it is known that the year here is 1506), they already have had children.[775] Furthermore, Varthema has seen this disease before; he knows it. I presume the far distant place he has seen it is Europe, as he goes on to compare this version with "ours." A look at the original Italian might make the references less ambiguous, but presumably the "they" of the "they say it is about seventeen years…" are local people in Calicut, though it is not impossible for him to mean those back where "our" version of the disease is. After all, Varthema publishes this book in 1510, so 17 years prior would be 1493, and Vasco da Gama did not arrive in India until 1498. It is

[773] Varthema, *Travels of Ludovico di Varthema,* 274.
[774] Ibid.
[775] Ibid., 266.

also worth remembering that 17 is given as an approximate, not a definite, time period. What is most interesting to us, though, is that *pua* gives us a local name for syphilis occurring along the Malabar coast at this early time period which begins to sound rather like an aspirated p, as in phu. This rings of the term occurring in KJ: *phuliṅga.* Or, perhaps, *phu*[t]-*liṅga*, fire[-marked] phallus? But it could just as well be, as the commentator on Vathema says, coming from *pūya*, indicating an open, oozing sore. As per Jamison this would be a common change in the vernacular languages. She writes: "In the Prākrits *y* is ordinarily lost between vowels."[776]

The presence of this disease makes the KJ an interesting parallel text to the *Qabriya* which we will encounter in chapter 6. Some of the same questions will be raised and are best answered in that context. In both cases, the disease is very helpful in the dating of the text.

[776] Jamison, 37.

Chambers – Berlin. First Folio (after a title page which may not be original).
10 lines with double red lines marking the margins. Outside margin top left is abbreviated title = kā jñā॰ Outside margin lower left = rā ma॰ and Sanskrit number 1.

XXX[777] // śrīgaṇeśāyanamaḥ // // śrīghanavaṃttarebhyonamaḥ // kālajñānaṃkalāyuktaṃ / śaṃbhunāyaccabhāṣitaṃ / yenaṣaṇmāsataḥpūrvaṃjñāyatemṛtyurogiṇā //1// kālaḥsṛjati bhūtānikālaḥsaṃharatibhūtānikālaḥsaṃharatiprajā / kālaḥsupteṣujāgarttikā lohiduratikramaḥ //2// kāledevāvinasyaṃti / kālecāsurapannagā / nareṃdrāḥsarvvajī vāścasarvvakālevinaśyati //3// caraṃtidinamadhyeca / patṃtīṃdrāścaturdaśā[778]**a**ddā nāṃśatamaṃtetusopikālovinaśyati //4// mānuṣaḥśatajīvīca / purādaivenabh[779]ā ṣitaṃ / vikarmasyaprabhāvena / naraḥśīrghravinaśyati //5// varṣāśītaṃtathācoṣṭyaṃ / pratyūṣaṃmadhyamaṃdinaṃ / **a**parāhnatasyarūpeṇakālaḥkālenakathyate //6// kālepha laṃtitaravaḥkālevījānivāpayet॰ //[780] kālepuṣph[781]avatīnārī / sarvaṃkālenajāy[782]ate //7// krodhalobhaprasaṃgenakālaḥkālatimānav[783]ān॰ // jñānayogesadātyasaiḥ[784]

[777] Bhale symbol. Yellow highlight means red ink on these parts.
[778] Or daṇḍa?
[779] Looks a lot like t but I think it is bh. Stray mark which I think is a little tear in the fabric
[780] Double daṇḍa after virama mid-verse.
[781] P not ph in 454 v. 7, 619 v. 7, and 1044 v.7.
[782] Stray dot under y.
[783] Stray dot under d.
[784] Other text 619 and 1044 = abhyāsī, one who recites.

Verso (bottom leaf) 9 lines. Outside margin, lower right, arabic numeral 2 in pencil.

kālorakṣatisarvadā //8// kāle**ā**sanatoyaṃca / kālevarṣamtimeghavaḥ / kāleka
rmasamuddiṣṭaṃviparītaṃvināśakṛt˳ //9// kālāgnirjaṭharejātetasyavāṃchācaturvi
dhā / **ā**hāramudakaṃnidrākāmaścaivaca[785]turthakaḥ //10// **a**nn[786]ahīnaṃdaheddhātuḥ**a**ṃb[787]u
hīnāścaśoṇitaṃ / kāmahīnaṃdaheccakṣkaḥ**a**nidrārogakāriṇī //11// ṣaṭ˳cakraṃ
ṣoḍaśādhāraṃtrilakṣyaṃvyomapaṃcakaṃ / svadehejonajānātikathaṃvaidyaḥsa**u**cyate //12//
ekastaṃbhaṃnavadvāraṃtriśūnyaṃvyomapaṃcakaṃ // paṃceṃdriyakuṭaṃveṣujatrātmātatramegṛhaṃ
//13// **ā**tmāśarīramityuktaṃ / **a**ṃtarātmāmanoviduḥ // paramā[788]tmābhavetprāṇāpaṃcatatvā
nidhārayet[789] //14// varṇahīnaṃyadātmānaṃ / paśyatyātmātmākathaṃcana / nāsaujīvatilo
kesmin˳ / sakālenavinaśyati //15// prakṛtisthaḥsadājīvovikṛtiṃcaivagachati /

[785] Crossed out double daṇḍa.
[786] It looks like an r but must be an n.
[787] It looks like a v, but must be a b.
[788] Insert tmā from right margin at ˳ here.
[789] Virama.

Recto. 9 lines. Outside margin, lower right, Sanskrit number 2. Outside margin, upper right side in Sanskrit ~"X53", but the five has a loop on the top like the start of the Sanskrit numeral 2. And outside margin, lower left, Sanskrit ~"62", but again the numeral has a loop like the start of a two, but thinner in this case. Looks more like a flourish than an integral part of numeral. Within the margins but below the 9 lines and in thinner lettering, Sanskrit "tre" just to the left of something painted over which looks like perhaps Sanskrit "me". In a thick script than this, but still thinner than the main body of the text, Sanskrit "tyuścaivahil" with large virama to the right of the 'l'.

sacavaikāladṛṣṭostikalātejovicāryate //16// manaṇvā[790]sthiraṃkuryāt˽manasāmā rutaḥsthiraḥ / mārutenasthiraṃtejokalātejopidṛśyate //17// **a**ṃgakaṃpobhavedyasmā dṛśyatecātmanoyadā // **ā**yuḥhṛd[791]yamadhyasthaṃsakālenavilokitaḥ //18// kāyā[792] nagaramadhyecapratolīsūnpayadbhavet˽ // ne[793]raṃḍrogachatetenatatpuraṃudvasaṃbhavet˽ //19// kāyānagaramadhyecamārutorakṣaupālakaḥ // praveśodaśabhiḥproktāḥ / dvāda śāṃgulanirgamaḥ //20// **e**kaviṃśatisahaśr[794]āṇiṣaṭ˽śatānitathaivaca[795] / niśāhaṃ cale[796]teprāṇān˽ //sacakālevinaśyati //21// saṃpūrṇaṃvahatesūryaḥsomaścaiva na˽[797]dṛśyate // pakṣeṇajāyatemṛtyuḥkālajñā[798]nenabhāṣitaṃ //22// māsenaṣaṇmāsi kaṃcaivapakṣeṇaivatrimāsikaṃ //paṃcarā[799]˽treṇamāsaikaṃ[800]mṛ[801]tyuścavahila[802]kṣaṇaṃ // 23 // udayaṃsūrya

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[790] Tiny mark above long a, but I don't think it is an anusvāra. Also,1044 and 619 have a short a here and no anusvāra.

[791] V mark above line with a barely distinguishable d, more clearly indicated in left margin. 1044, 619 and 454 have hṛdaya here.

[792] 619 = kāya.

[793] 619 = nareṃdro.

[794] Or śnr or śṇ.

[795] Has that tiny bit above the long a that isn't an anusvāra. Is this meant to show a daṇḍa when get too close to letter, so not a long a at all? 1044 and 454 short a, the latter with a daṇḍa.

[796] Strange almost horizontal mark starting out from the end of the 'e' diacritic. Stray mark, flying r, crossing out erroneous e? 1044, 619, 454 have an a, 1044 has an r in place of the l. Could this mark be meant to be an r?

[797] Has an arrow over the top of the n. The dṛ to be inserted is on left margin.

[798] Small dot high above long a. Stray mark?

[799] Insert mark indicates the tre below the line should be added here.

[800] Half scratched out oval floating above the k, anusvāra?

[801] Insert mark indicates the 'tyuścavahil˽' below should be added here.

[802] Looks like a virama after l below the line to be inserted, but it is much higher that it should be. Does it just mark the end of the insertion? Meter better with a and 454 has the a.

Bottom. 9 lines. Outside margins at lower right, penciled in Arabic number 3.

mā[803]rgreṇacaṃdreṇāstamanaṃyadi / dadātiguṇasaṃghātaṃviparītaṃcināśadaṃ //24// śuklepa kṣebhavedvāmākṛṣṭyapakṣecadakṣiṇā // **u**bhayostrīṇidināṇidṛśyaṃtecaṃdrasūryayoḥ //25// paṃcabhūtātmakaṃdīpaṃcaṃdrasnehenasaṃyutaṃ / rakṣitaṃsūryavātena / tena jīvasthirobhavet ˎ //26// **ā**tmādīpaśivājyotiḥ**ā**yusrehakalātmakaḥ // kāyākajalasaṃsāredṛtt[804]ireṣātanurmatā //27// mārutaṃsth[805]aṃbhayitvācasūryavaṃdha yateyadā // karmayogasadābhyāsairaṃrtaiḥśaśiśrāvayet ˎ //28// gaganāt ˎśrava tecaṃdrokāyāpadmānisiṃcayet ˎ // **a**bhyāsājīvaṃterjatuḥ / sūryakālopivaṃcaye t ˎ //29// tyajeddakṣiṇavāmācamadhyamārgātpravarttate / gataṃnidrānaivagachetamuktā saṃyutahīnatā //30// śeddesparśetathāghrāṇesvādupasathaivaca // manaścaharateya

Top. 9 lines. Outside margin on right Sanskrit number 3.

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[803] Short a in 454 and 619.
[804] Looks more like tr, but 619 has tt and that might make more sense.
[805] 619 and 454 have unaspirated t.

trarahaṃmānasa**u**cyate //31// tīrthe[806]snāneguraudeve / dhyāne[807]dānetapasica / manasākri yatekāryaṃrahamānaḥsa**u**cyate //32// **i**ṃdriyāṇivaṃdhayitvāmanaścaikāgrakārayet˳ // tenābhyāsenabhoktavyaṃsvargraṃnarakādiphalaṃ //33// kālajñāneprathamopadeśaḥ //[808] vātaśleṣmācapittaṃcajñāyatedhātudarśanāt˳// bhedābhedavibhedenakālajñā naṃsadāv[809]adet˳//34// vadhiraścasvabhave˳[810]t˳ / tasmāsphuṭavaktācapittalaḥ // **u** bhābhyāṃhīnatāv[811]ātesvarastasyaivalakṣaṇaṃ //35// tvaritāgatirbhavetpittevātecai vatumaṃdatā // sṭhiragāmībhavet˳śleṣmā /gatiretaiścaceṣṭitaṃ //36// pittarogī bhaveduṣṭmaḥvātarogīcaśītalaḥ / **ā**rdrataścatathāśleṣmādeh[812]asyaivalakṣaṇaṃ // 37// pittapaṃgukaphaḥpaṃguḥpaṃgavomaladhātavaḥ / vāyunāyatranīyaṃtetatravarṣati

[806] Small hole above r and e.
[807] Blotchy ne; above ne written clearly.
[808] Visargha and dandas cross over margin.
[809] Bottom of letter scratched off.
[810] Does have a virama mark here but looks like it must be an accident and meant to go on just the neighboring t which also has one. Plus v has the e on top.
[811] V scratched.
[812] Mark above h.

Bottom. 9 lines. Bottom right Arabic number 4 in pencil.

meghavat॰ //38// **ā**daucayāyaterogaḥsādhyāsādhyastathaivaca // saṣ[813]kaloni ṣkalovāpijīvitaṃmaraṇamdhruvaṃ //39// nidrāsaukhyaṃbhavedyasyaśarīraṃsodya maṃtathā // **i**mdriyāṇiprasannānisarogīnavinasyati //40//[814] sakalaṃkālahī naṃcaniṣkalaṃkālaṃsaṃjutaṃ / **i**ṃdriyāṇāmvikāraiścajñāyatemṛtyujīvitaṃ //41// saumyadṛṣṭirbhavedyasyaśrotovaktātathaivaca //gudāśāṃtirbhavedyasyasacasādhyo nasaṃśayaḥ //42// pāṇipādaubhaveduṣṭyodīrghasvalpataraḥsmṛtaḥ / jiṭ?kākoma tāṃjātisarogīnavinaśyati //43// khedahīnojvaroyasyanāśāsvāsaḥprava rdhate / kaṃṭopikaphahītaścasarogīnavinaśyati [815]44// naitanyaṃsakalaṃyasyagaṃ dhasvādusphuṭaṃbhavet॰ // kalāpūritakaṃvastusaj[816]īvenātrasaṃśayaḥ //45// kā

[813] 454 and 619 have sa-kalo.
[814] Note 454 and 619 skip this verse and pick up at the next one.
[815] No dandas on the near side.
[816] Mark on j, almost looks like a double j but may just be a reworking of the j.

9 lines. Bottom right Sanskrit number 4.

lajñānejīvitasamudde[817]śaḥ // //[818] saṃdhigaścāṃtakaścava**u**gdāhacitravibhramaḥ /
śītāgaḥstaṃdrikaścath[819]kaṃṭ[ḥ]akubjaścakarṇikaḥ / hāridrobhugnanetraścaraktaṣṭī
vīpralāpakaḥ / jihmakaścetyabhinyāsaḥsaṃnipātastrayodaśaḥ // // saṃdhi
gesaptamāsāji**a**tagedaśavāsaraḥ / **u**gdāheviṃśatirjñeyāstrīnyavdāni
cacittage / śītāṃgepakṣamekaṃtutaṃtdriyepaṃcaviṃśatiḥ / hāridrevāsarāḥ
saptaḥkaṃṭhakubjetrayodaśaḥ / karṇikecatrayomāsāḥbhugnanetradināṣṭakaṃ /
raktaṣṭīvīdaśāhānipralāpāṣṭecaturddaśaḥ // jiṅkakeṣoḍaśāhāni**a**bhinyāsena
paṃcakaṃ / marjādāsaṃnipātānāṃpratyekaṃsamudāhṛtā // maryādābhyāṃtarevighnaṃtatordhvaṃsu
ṣamāpnuyāt˳ // **a**nilojātipittasyapittaṃjātikaphānale / kaphastukaṃṭhamāyāti

[817] Has a th in slightly paler lettering over the ś. Does it go with the line below this one?
[818] This and the following double set of dandas are not numbered. On the next page resumes numbering with the number expected here: 46.
[819] Unclear tha, but clearly written above first line (there is very little space in between first and second line).

9 lines. Bottom right Arabic number 5 in pencil.

jīvitaṃtasyadurllabhaṃ //46// rātraudādyobhavedyasyadivāśītaṃcajāyate // kaphapūrita kaṃṭhasyatasyaṃmṛtyurbhaviṣyati //47// hīnasvarogudabhraṣṭaḥkāśasvāsamākulaḥ / hikvāśophasamā /yuktākukṣirogīnajīvati //48// hṛdayaṃnābhināśāvapā[820] ṇipādaucaśītalai // śirastāpobhavedyasyatasyaṃṛtyurbhaviṣyati //49// druṃkāraṃ śītalaṃyasyaphuṃtkāraścāgnisaṃbhavaḥ / mahādāghobhavedyasyatasyaṃṛtyurbhaviṣya ti //50// **a**ṃkamp[821]ogatirbhaṃgovarṇaparāvarttaṇvaca / gaṃdhasvādaunajānajānatisa gachedyamaśāḥsanaṃ //51// daṃtapaṃktyaṃtarenyastaṃ / naviśedaṃgulītrayaṃ / sayātisa ptarātreṇaniścitaṃyamamaṃdiraṃ //52// śīrṣesvedobhavedyasyamukhecānnaṃnarocate / **a**ṣṭanāḍī**a**nirvāhosopikālenavīkṣitaḥ //53// **a**ruṃdhatībhavejiṅkādhruvaṃ

[820] Visarga ends line, but appears to be crossed out.
[821] Blotted ink.

9 lines. Bottom right Sanskrit number 5.

nāśāgramucyate / bhruvormadhyaṃviṣṭy[822]upadaṃtārikāmātṛmaṃḍalaṃ //54// **a**ruṃdhatīdhruvaṃ caivaviṣṭyostrīṇipadānica // **a**yurhīnānapaśyaṃticaturthaṃmātṛmaṃḍalaṃ //55// jiṅkākṣaṇābhavedyasyamukhaṃcaūṃūmāruṇaṃ // **ī**dṛśaṃlakṣaṇaṃyasyasagachedyama śāsanaṃ //56// dṛkṣasyamūlaśākhāyāṃphuliṃgā**a**gnibhāḥ /prabhūtiṣaḍbhirmā sairvāmānavomrīyatedhruvaṃ //57// **ū**ṃḍalīpīḍyateyasyavāptenāhāravaṃdhanāt ` // **ā**hāraṃhṛdayeyasyasavarṣeṇavinaśyati //58// dhārāviṃdusamāyasyapatate camahītale / saptāhājāyatemṛtyuḥkālajñānenabhāṣitaṃ // 59// śrī??ī pratāpanirmuktoprasādīkrodhabhāṣaḍbhirmāsaiścajojāvaḥsagachedyamaśā sanaṃ //60// **a**śaktaḥpāṃḍuvarṇaścava**ū**nisvāśasaṃjutaḥ / valaṃcapatatenityaṃ

[822] Dot high above. I think it is a hole not anusvara. Y?

9 lines. Bottom right Arabic number 6 in pencil

taṃparivarjayet˳ //27// nonmūlayatinetrāṇigadagadaṃgātradṛśyate // **ā**lasyam**u**ci ścaivajvariṇamtaṃparivarjayet˳ //28//[823] gurviṇyāḥvāladṛ??ecakāmaśokanavajvare / laṃgha naṃnaivanakarttavyaḥpūrvvācāryavadaṃtite //29// nirvātasevanonasvedāt˳laṃccanādu ṇavāriṇā // pānātadādyajvarekṣiptepaścātkvāthaṃprayujyate //40// **ā**lasyama **u**cistṛṣṭmāvidāhaḥparviṇovyathāṃ / saglānimūtravā**ū**lyaṃjvarasyāmalalakṣaṇaṃ //41// jvaravegādhikātaṣṭamāpralāpaḥsvasanaṃbhramau // malapradṛtyurucikledaḥpacya mānasyalakṣaṇaṃ //42// **a**trākāṃkṣāśiraḥkaṃḍūcapurgatricalāvvavaṃ / prasvedobhu khapākaśca // jvaramuktasyalakṣaṇaṃ //43// jvaralakṣaṇaṃdeśaṇcamaḥ // jv?arasyapratha motthānelāṃcanaṃtadinatrayaṃ / nadeyaṃkvathitaṃtoyaṃnapathyaṃcāpirogiṇaḥ //44//

[823] No color on the number.

9 lines. Bottom right Sanskrit 11.

pravātaṃnātinirvātaṃnapathyaṃnacalaṃghanaṃ / kriyāsādhāraṇākāryāmā**u**ṣejvarasaṃta vaṃ //45// **a**jīrṇajāharasvedapittajāsaruttathākālajaraktasaṃbhavākaphaṭhā?thaikā narayastrahādyobhavaṃticadvādaśamānavajvarāḥ //**36**// ajamodāharītakyausau varcalasamanvitau / kacūreṇasamaṃcūrṇaṃ**a**jīrṇajvaranāśanaṃ //**37**// kaṭukīpi ppalīmūlaṃmustācaivahnītakī / kiramolāsamaṃkvāthomalajvaravināśanaḥ //38// marddanacaśarīrasyasaiv[824]anaṃtapūvāriṇā // yogoyaṃkathitovaidyaḥkhedajvara vināśane //39// maricaṃsuṃcalaṃsuṃṭīkirātaṃc[825]aharītakī / pippalīkaṭukā caivavātajvaravināśane //40// caṃdanaṃcasugaṃdhaṃcaṃvālakapittaparppaṭaṃ / sustā suṃṭīsamāyuktaṃ / **u**sīraṃpittanāśanāṃ //41// drākṣācaivaguḍūcīcamustāparppa

[824] Stray mark above v looks like a crossed out anusvara.
[825] Debris on a c, or…?

9 lines. Bottom right Arabic number 7 in pencil.

ṭakaṃtathā // kaṭukācasamaṃkvāyaḥkāsajvaravināśanaḥ //42// guḍūcyaṃtiviṣāpūrvvāmti ṣṭādhanvacāsakaiḥ / vāsākhadiraniṃ???[826]apivekvāthaṃkaphajvare //43// hiṃgvāmaricapippalyā kirātaṃsuṃṭhis[827]aṃyuta // **e**taccūrṇapradātavyaṃdṛṣṭ?ijvaravināśane // **ū**mpalānikarīrasyama dhusaṃmilitānica / pītānihaṃtivegenatāpaṃsoṇitasaṃbhavaṃ // maricaṃpippalīcaiva suṃṭhīkayaphalaṃtathā // **e**teṣudīyatenāsaṃkaphajvaravināśaṃ // **au**ṣadhairmmaṃatravādai śca**e**kadvitryaṃtarejvare / daidyaśāstravicārajñaiḥkarttavyācasadākriyā //47// suvarṇa sumanāvījaicūrṇitaiḥguṭikākṛtā / tṛtīyādijvarānsarvvān˽ nāsayatyupajīvi naḥ //48// niṃvatailasyanaśyenagātrābhyaṃgaṃkarotica // tasyakramatinodehovi ṣaṃsthāvarajaṃgamaṃ //49// kṛṣṭyavarcarakaṃsigruḥśuklasaiṃdhavasaṃyutaṃ / pivatetasya

[826] Illegible cluster.

[827] Smeared u below, or a smeared anusvara for next line, or dirt?

9 lines. Bottom right Sanskrit number 12.

naśyaṃtivātagraṃthikṣaṇādapi //50// kālajñānejvarotpannakriyāsamuddeśaḥṣaṣṭaḥ
// pittatṛṣṭyācamūchacivātanasūlaṃcajāyate // kaphetaṃdrīkṣayedāghodehasṭhāsyaivala
kṣaṇaṃ // saspi[828]śrairlakṣaṇopetaṃdeśaḥsādhāraṇaḥsmṛtaḥ // caitre**u**śleṣmalārogāḥhṛda
yedāghadāyakaḥ //52// vaiśāṣecatathājñeyomārutaissahasaṃbhavet˳ // jeṣṭepittaṃtabā
svāḍherktpūrṇaṃcajāryate //53// śrāvaṇevātilāḥrogāḥnabhasisaṃnipātajāḥ
// **a**śvanedvardvajāḥrogāḥrasāpūrṇāścakārtnike / mārgeṣuśleṣmalārogāḥpauṣmāse
tathaiv[829]aca // māghamāsetapasyaivavātaśleṣmaḥvikārajāḥ //55// **a**ṃkollamūlapānena
vaidapānāvātahāriṇī // viṣaṃnirghiṣatāṃyātirasāyāṃtirasātalaṃ //56[830]// kapha
vātaśirovātāsaṃnipāścakāmalā // madhūkasāranaśyenaddoṣānaśyaṃtiśleṣmajāḥ //

[828] Blot on consonant cluster.
[829] Waterblot on this letter.
[830] Has what looks like an r on top.

10 lines, the 10th spilling over at the righthand side below the end of the 9th. Bottom right Arabic number 8 in pencil.

57// dāhakvaṃṭakitaḥsavārinayanaṃdṛtatkaṃṭā**ā**modanaṃ / kaṃjūścasvasanaṃsaśopha
vamanaṃmūtraṃsuvavāṃprabh[831]aṃ // śaithalyaṃkaṭirodhadaṃtaruciraṃkukṣaucavātamāgrahaḥsyā
??aulpamukhamā??mi?tiuvātagrahaḥ //58// mustāṭarūṣaḥsuradārukuṣṭaṃni
digdhikānāgarakākajaṃdhā / drākṣāmṛtāpippalikākaṣāyaḥ / pivevvavāta
??aravyuktajaṃ**u**ḥ //59[832]// kākolī??hatīmustākuṣṭamdāru??aṣāmṛtā // suṭhīkvā
thaḥsitāpītohaṃtighātajvaraṃsvaraṃ //60[833]// maricaṃsuṃcalaṃsuṃṭhīkirātaṃcaharī
takī // pippalīkaṭukācaiṃ[834]vavātajvaravināśanī //61// saṭīmuṣkaramūlaṃca
bhārgīśṛṃgīdurālabhā // guḍūcīnāgaraṃpāṭhākirātaṃkaṭurohaṇā //62// **e**ghaḥ
saṭādikaḥkvā??aḥsatvvavātajvarāpahaḥkāsādiṣucasopheṣudadyā???[835]opadraveṣu
ca //63//

[831] Or a t with a smear?
[832] With r on the top.
[833] Not colored.
[834] Anusvara or hole?
[835] Glob of ink.

9 lines, but letters above top line and below bottom. A fair amount of ink erasure/scratching away. Bottom right Sanskrit number 13.

nu
paṭolācaguḍūcīcamustācaivadhamāsakaṃ / niṃvatvakaparppaṭhaṃtiktābhūtiṃvatṛpha
lādṛṣā //64// paṭolādirayaṃkvāthāvātajvaraharaḥsmṛtaḥ // vātajvadhikāraḥ //
cittesaṃbhramatāmukheka[836]ṭukatāsvāsoṣṭmatā // mūtrevaivvaśarārttiragadahanaṃpārścā
sthivodhāratiḥ // śoṣaḥpaśyatimālapātatimareraktecanetrabhrama // kopovi
smayaṃrodatān?ilaparaipittajvaraṃlakṣayet˳ //65// kvāthaṃkirātakaṃmustīdha
tvavāsāmaparppaṭaḥ / haṃtipittajvaraṃdādyaṃbhramadāhaṃkṣaṇādapi //66// vṛṣā
durātatāśyāmāparppaṭakaṭurohiṇī / kirātakaputasteṣāṃkvāthaḥpītaḥs[837]i
tāyutaḥ // raktodbhavaṃmahādādyaṃtṛṣṭyāmūrchāmatibhramaṃ / pittajvaraharatyāśupī
tamātroyathāmṛtaṃ //68// [838]stākaḍūparppaṭakaṃkirātaṃchinnodravārigaṇikāsa
mu

[836] Scratched, but can make it out.
[837] End of s worn off.
[838] Mark which looks like it indicates the mu below the line should be inserted at the start of this verse. Like the mark here but upside down.

9 lines. Bottom right Arabic number 9 in pencil.

māṃśaṃ // kvāthonipītoharatiṃpralāpaṃ / tṛṣṭyānvitepittabhavajvareva //70// pittajva
raḥ // netrevāriyutegalagrahakṛtesvāsomukhekṣāratā // pādaudāghavutaukarauca
jaladaumūtrauśirorodhanaṃ // śoṣaḥsarveśarīrasaṃdhiṣumahātāśīcavādhyatathā //
yastusv??[839]melaṃkalegharamahāsoyaṃkaphāvyajvaraḥ //71// kaṃṭakāryyamṛtādā
ruvṛṣāviścāsamāṃśakaḥ // kvāthaḥkaṇārajaḥpītaḥsleṣmajvaravināśanaḥ //7
2// kaṇāviśvāmṛtādārukirātauraṃḍamūlakaiḥ / nidigdhikāvṛṣākvāthaḥpītaḥ
śleṣmajvarāpahaḥ // dārusustāmṛtākṛṣṭyādurlabheraṃḍamūlikā / kirāyatasamaḥ
kvāthaḥśleṣmajvaravināśanaḥ // ?ikaṭukaṃnāgapuṣpaṃcaharidrākaṭurohiṇī //
kākajaghāphalakuṣṭaṃcakvvāthaṃhaṃtikaphajvaraṃ // kaṭūphalāṃvudharadhyanyakalā

[839] Entirely washed out here. Not very clear prior to it.

9 lines. Bottom right Sanskrit number 14

gāśṛṃgaparppaṭakavisvavacābhiḥsābhayāmarsugaṃdhitṛṇābhiḥvarga**e**ṣakaphavāta
gadaghnaḥ //76// **a**r?aṃtāvālakaṃmustānāgaraṃkaṭuroharṇī / **e**ṣaśleṣmajvaraṃhaṃtidīpa
yeccadrutāśataṃ //77// śleṣmajvaravikitsā // hṛtkaṃpodahanaṃśarārttivamanaṃkuś[840]
kṣaucavātagrahaḥsvāsodehavimoṭanaṃtṛṭ rucirdāghaḥsadānetrayoḥ / kaṃḍūḍṛkedamatīvavi
sāyakaraṃkadvamlamāsyamsadā // mūtraṃdhūmalaraktavarṇamathavātecapittajvare //78// ni
rdigdhikātrāyamīṇāguḍūcīsārivāvalāvalā / masūravidalakvāthovātapittajvaraṃ
jāyet // [9][841]// mudgāmalakacūrṇānāṃprayuktānāṃghṛtenanu // **ā**mlakāṃjikayuktānāṃ
pralepodāhanāśanaḥ //80// dadhisthayūḍimaṃrodhraṃcidārī / vījapūrakaṃ / śiraḥprale
poveṣṭyādāghavināśanaḥ //81// triphalātṛvṛtārāṣṭyādrīverīpippalīdvayāṃkā

[840] Looks like first half of ś, but can't form a conjunct with kṣ which follows. Also looks like a #2, but that would make no sense.

[841] V mark above blank space where expect 7, blob below it, and in line below that a d? Above the Sanskrit 9 here is one of those ornamental "r"s.

9 lines. Bottom right Arabic number 10 in pencil

kajaṃghācadusyarśācūrṇoyaṃvātapittahṛt、 //82// vātapittajvaracikitsā //snigdhaṃkṣā ?[842]mukhaṃśirovyathayatesarcāṃgapīḍābhavet、 / netrevāriyutākarotivamanaṃromāṃcatā narmmaṇi / dīrghaṃnisvasatotathārttidahataṃvānidradoṣākule / mūtraṃphenasamākulaṃ casahitevātajvareśleṣmaṇi // vyāghrīsuṃṭhīmitokvāthaḥpippalīcūrṇasaṃyutā / vā taśleṣmajvarasvāsamaḥkāsapīnasaśūlajit、/ kaphacātecavātyattkāpāṭhāragvadha vatsakā /pippalīcūrṇayuvau[843]ktācākvāthaḥchinnodbhavodbhavaḥ // pathyokastuṃvarāmu stosuṃṭhīkaṭūtūṇaparppaṭaṃ / kacūraṃcakvābhārgādavādkamathahiṃgujuk、 / jaṣṭīma dhūnpalaṃdrākṣāsārivāpadmakeśaraṃ / murālopalasārīcaviphalāpa??akatathā / madhūpacaṃdatairvyāghrīpāṭhāpippalakauṭajaiḥ / niśrotracitracikaṃkalkodyātaśle

[842] Obscured.
[843] Extra mark above v, as if e-au.

9 lines. Bottom right Sanskrit number 15.

ṣmaṃjvaraṃjayet˳ // vātaśleṣmajvaracikitsā // // netrepaśyatinīlapītatimare**u**
dvarṣaromeṣuca // kāsorocakavismayomeratiḥvakrekaṭukṣāratā // pādaudādyayutauta
dāgadaiḥlagrahaḥn?uttidravānaḥsadā / mūtraṃkuṃkumapijaraṃbhiṣagahopittekaphavyajvare
//89// paṭolatiṃvapatrāṇipathyākaṭukarohaṇī / śleṣmapittajvaraṃhaṃtikvāthaṇ?ghāṃ
niṣevitaḥ //90[844]// kiramālocacāhiguvālakaṃdhyanyakaṃniśā // mustāya??itathā
bhārgāparpaṭaḥsamabhāgataḥ //91[845]// **a**ṣṭāviśeṣitaḥkvāthaḥmadhunāparipācitaḥ //
śleṣmapittajvaraṃhaṃtirogiṇaḥpathyabhojinaḥ // paṭolīriṃgiṇīsuṃṭīkirātaṃka
ṭhurohiṇī / guḍūcīṃdrayavāsāruśigrubhārgācacaṃdanaḥ / kvāthaḥpītorucidāhaṃtṛ
ṇmācharddimasaṃvaraṃ // śleṣmepittajvaraṃhaṃtikāsaṃsū[846]laṃcadāruṇaṃ //94// triphalāvā

[844] 9 has the r above it.
[845] Slight creeping above the line, as if toward the r.
[846] Or virama?

9 lines, but with one syllable written below the last line. Bottom right Arabic number 11 in pencil

lakaṃjaṣṭī**a**ṭarūṣapaṭolikā // kvāthomadhuyutaḥpītaupittaśleṣmajvarāpahaḥ / harīta kākaṭhuphalaṃdhamāsaṃkṛṣṭyajīrakaṃ / bhūniṃvatiktāvacādārukaphapittajvarauṣadhaṃ // ka phapittajvaracikitsā // samyak˛śaucenahīnaṃkṣutavivaśataṃnusuktakeśaṃhasaṃtaṃ / niṣṭī vaṃtaṃṭhadaṃbhaṃamadataparavaśaṃjṛṃbhamāṇaśmavalaṃtaṃ // bhītirbhrāṃtyaṃnavastraṃparikalitaru ṣaṃlaṃkhi [goes with line above]
tātsaṣṭadhyatyaṃ / chiṃdraṃlaNcāvaśāṃtidhruvamihamuruṣaṃprāyasoduṣṭadevā / **a**raticamataśoṣaḥ sadya(n)udgāratṛṣṭyā // hṛdayajaṭaravādhādādyasaṃtāpamūrchā / vadanavirasatāsyāt˛gātrabhaṃ???[847] go**a**ti??[848]parapraśatvaṃdoṣasaṃbhūtatāpaḥ //98// mustāmalakaguḍūvīnīnāgaraṃkaṃṭakā rikā // kaṇīcūrṇasamaḥkvāthodovyajvaravināśataḥ //99// tacajvarāmalastasyaka ṣāyāv?iṣamopamā // **ū**rutehṛllāsahikvādhyyanādikā[849]**a**pi //200[850]// sadosyā hai[851]

[847] Big ink blot.
[848] Ink blot.
[849] Line through it?
[850] Definitely 200 and not 100!!!
[851] As if to be inserted after sa?

9 lines. Bottom right Sanskrit number 16 with the r-like superscript.

datītepijvaropadravavṛdvimnat˛/ laṃghanādikamastatra**u**ryādveḥkaphasaṃravyayāṃ //1// yayeddo ṣaharaṇaṃmahādādyajvarasuyaḥ // prasurptakṛṣṭyasarppaṃsaḥkarāgreṇaparāgṛśat˛ // jvarakṣī ṇasyanahitaṃbhr?amanaṃcavirecanaṃ / kvaṣāyabhakṣaṇaṃcaivavarju?yettaruṇajvarī / kirātādvā mṛtodīvyadvahatīdvayagokṣk[852]araṃ / sthirācakalasaṃcaivakvīthovātajvarāpahaḥ //4// trayaṃtī parppaṭosīrattiktābhūniṃvaduspharśākaṣāyomadhusaṃyuktaḥpittajvaravināśanaḥ //5// niṃvaviścāmṛtādārusaṭībhūniṃva**u**kvarā / pippalyovṛhatīcaivakvāthaṃhaṃtikaphajva raṃ // nirddigdhikāmṛtārāṣṭyātrāyamāṇāmṛtāyutaiḥmasūravidalaiḥkvāthovāta pittajvarajayet˛// mustāparppaṭakaṃśuṃṭhīguḍūcīsudurālabhā // kaphavātarucichaḥ[853] r[854]ddidāhaśeṣajvarānviṣakirātaṃtiktakaṃmustaṃguḍūcībisvabheṣyajaṃ // cā**u**rbhadraka

[852] Not a possible conjunct.
[853] Line coming down off of the visarga
[854] This makes no sense after a visarga. Is it meant to be for a vocalic r, or to be an auspicious symbol?

9 lines. Bottom right Arabic number 12 in pencil. Also, there appears to be a shadow impression from the facing page; that is, on the lower right-hand corner of the next page is the Sanskrit number 17, and on this page at the to right—just where the two pages would have be in contact—is a faint mirror image of the 17. Shadowing is especially strong as move toward the right border, but less distinct. Also in Arabic numerals in pencil is the number 12 sideways under the last line of the page near to the left-hand margin marks.

mityā**ū**pittaśleṣmanaharāpahaḥ //9[855]// dāruparppaṭabhārgādivacādhyanyakaka˛ pha leḥsābhayāviścabhūnivākvāthohaṃtikaphoktaṭaṃ //11// vātaśleṣmajvaropītohi ṭ[856]kāṃsvāṃsagalāmayān˛ // kāsaṃsaukaprasakaṃcahanyāttarumivāśaniḥ //52// pīta parppaṭakaṃdhyanyaṃpaṭolāriṣṭasādhitaṃ / pivetsaserkaraṃkṣaudraṃpittaśleṣmajvarāpahaḥ //13// niśādvayāṃvudośīramakakāragvadhādbhavaṃ / niśādikaḥkaṣāyoyaṃkapha pittajvarāṃtakṛt˛ //14// grathikaṃparppaṭaṃdhyanyaṃlāṃdraṃcaṃdanaraṃgulaṃ / drākṣyābhayātiḥ kvāthyaśītapittajvarāpahaḥ //15// mustāparppaṭakosīraṃcaṃdanodīcyanāgaraiḥ / sṛ taṃśītajalaṃdadyāt˛dādyajvarapraśāṃtaye //16// guḍūcīdhyanyakaṃniṃvacaṃdanaṃpaya kānvitaṃ // tṛṣṭyādāhārucittharddisarvvajvaraviṣāpahaḥ //17// paṭolācaṃdanaṃmūrvāti

[855] Nine has the r like superscript.
[856] Or n?

9 lines. Bottom right, Sanskrit number 17.

ktāpāṭhāmṛtākaṇā /pittaśleṣmārucicharddijvarakaṃḍūpiṣāpahaḥ //18// guḍūcī
niṃvakastuṃvaraktacaṃdanapadmakaṃ // **e**ṣaḥsarvajvarānahaṃtiguḍūcyādistudīpanaṃ /9?
// hṛllāsorocakacharddipipāsādāhanāśanātriphalātrāyamāṇāvamṛdvīko
kaṭurohiṇī // pittaśleṣmajvarāśc?aivakaṣāyātdyāgulomikā //20// śarkarāma
kṣimātrāśc?akaṭukāmuṣṭyavāriṇā // pītājeghajvaretraṃ**u**kaphapittasamudbhavaṃ //21
// pāṭalāyavanikvāthyamadhunāmadhurīkṛtaḥ // tīvrapittajvarodayādādyajvarasya
nīśanaḥ / niḥkvāthyachinnarohāyaḥpippalīcūrṇasaṃyutā / pītāṃrātriṃjvaraṃ
hatiśuṣkaṃvṛkṣoyathāśaniḥ /22// pippalīcūrṇasaṃyuktaḥkvāthaḥchinnodbha
vodbhūvaḥ // jīrṇajvarakaphāśc?aivapaṃcamūlījatothavā // bhustāmālakaguḍūcī

9 lines, but with a syllable above the first line. Bottom right Arabic number 13 in pencil.

haṃ[857]
viśvauṣadhikaṭhakārikākvāthaḥ // pītaḥsakaṇācūrṇosamadhurviṣamaṃjvaraṃ ̨ti //
24[858]// sanārārosīdūdhanaḥsadhānyaḥsapippalīkaścasacaṃdanaśca // tṛtīyakaṃhaṃ
ti[859]kṛtaḥkaṣāyaḥsamākṣikaścāpisaśarkaraśca // mahauṣadhyamṛtāmustācaṃdanosī
radhyanyakaiḥ / kvāthaṃstṛtīyakaṃhaṃtiśarkvarāmadhuyojitā //27// pathyāsthirānā
garadecadārudhyatrīphalairukvathitaḥkaṣāyaḥsitopalāmākṣikasaṃprayuktā // cā
turthakaṃhaṃtyacireṇapītāṃ //28// paṭolīcadanaṃmustāniṃvadhyatrāṃvabhītakaṃ / jalaṃ
??[860]rkarāyāyuktaṃpivetyaryuṣitaṃśiti //29[861]// haṃticāturthakaṃghoraṃpānaṃśreṣṭami
d[862]aṃsmṛtaṃ / agastipatrarasenanāśācāturthakaṃharet ̨ //30// sanāgaraṃsamṛdvīkaṃ
saghṛtaṃkṣaudraśarkvaraṃ / sṛtaṃpayasikharjūraṃpipāsājvaranāśa[863]naṃ // 31// tudakāṃ

[857] Above the line, but arrow indicates insertion.
[858] Number 4 not entirely clear.
[859] Possible faded anusvara, but I don't think so.
[860] Thick debris.
[861] No color.
[862] Scratched.
[863] Intentionally crossed out letter (v?).

9 lines. Bottom right Sanskrit number 18.

śatriguṇaṃkṣīraṃśiṃśapārasasaṃyutaṃ / kṣīraśeṣaṃcatatyeyaṃsarvvajvaraharaṃparaṃ //32
// **a**pah[864]aratiraktapittaṃkvaṃḍūgulmaṃcapaittikaṃhaṃtti / jīrṇajvaraṃcaśamayatimṛdvīkābhyāṃ
??[865]ṃyutāpathyā //33// **ā**malakyācibhītakvyopippalaścitrakastathā // **ā**mala
ky[866]ādirityeṣaṇaḥsarvvajvarāpahaḥ //34// pāṭeṃdrayavabhūniṃvāmustāparppaṭakā
nvi[867]tā // jayatyāmāmatīsāraṃsajvaraṃcamahauṣadhaṃ //35// guḍūcyātiviṣādhya
nyaṃsoṃṭhīvilvaṃcavālakaṃ // pāṃṭhābhūniṃvahṛvereṃkurajaṃkaṭ phalaṃsmṛtaṃ //36//
haṃtisarvvamatisāraṃjvaradoṣaṃcamistathā // samūlāpadravaṃsvāsaṃhanyātsu
dustarāṃ //37// guḍūcīyadyaroghrāṃṇaṃsārivātyapalostathā // śarkvarāmadhuḥ
kvāthaḥpītaḥpittajvarāpahaḥ //38// bhūnivamaṃjariyutākhyamahauṣadhaṃcaharīta

[864] Crossed out anusvara.
[865] Light grey obscuration over letters. Might be jvara.
[866] Obscured, but appears to by ky.
[867] Obscured, but I think I can make it out.

10 lines, the final one being toward the right -hand margin. Lower right-hand side, outside margin is an Arabic #14.

k????[868]kaṇākhadirasyasāraṃ // vāsārasenaguṭikāvadenedhṛtāvatāpīprakopaśamanāka
āthatāvavai[869]dyoḥ //39[870]// **ā**lasyamarucitkarṇasaṃdhyasthiśīrṣāvedanāḥmūrchādādyastṛṣā
nidrājidkābhavatipāṃḍurī //40// pītevālohitenīlecovaneśītalevapuḥbhramaḥ
kāṃ[871]somukhaṃtaptaṃsaṃnipātadv[872]āraṃgināṃ //41// cakṣubhramomanaḥsaityaṃ**a**ghoraṃcittasū
tyatā / vidkalaṃjāyatavākyaṃsaṃtipātasyalakṣaṇaṃ //42// niṃvovātaharaḥkalau
surataruḥśākhāpraśākhākulaḥ // pittaghnaḥkaphanāśanaḥkṛmiharodurgaṃdhi
nirnāśanaḥ // kuṣṭacyādhiviṣāpahaḥvraṇaharaḥprāk pācataśodhanaṃvālānāṃ
hitakārakovijayateniṃvāyatasmainamaḥ // jvaracikitsāsaṃpūrṇaḥ // nivo
dāruvacāstustātriphalākaṭuṇehiṇā // paṭolakvāthapānenajātitridopi[873]
kājvarāḥ // // tridoṣakvāthaḥ // //

[868] Glob of junk.
[869] Very pale. Could be just a short a.
[870] Has flourish above.
[871] Anusvara?
[872] Funny line above dv.
[873] Uses same stem for o and i.

9 lines. Bottom right Sanskrit 19 with rising second half of the 9.

taṃdrālasyaṃmukhamadhuratāthāṃvanaṃkaṃṭhaśoṣaṃ // nidrānāsoścasanacikalomūrchanāśo
cabh(?)āca / jiṭkājāḍyammuruṣamṛṣṭaṃṣṭiśīrṣevyathāsyāt˳ // **a**ṃtardāhobhavatiyadi
vācidvidoṣastridoṣaḥ //45// tridoṣajvaranālakṣaṇaṃ // draṣṭātridoṣajaṃdyoraṃjva
raṃprāṇāpahārakaṃ // tasmāddāhokapasyāsyaśoṣaṇaṃparikīrttitaṃ // 46// na
kuryātpittaśamanaṃyadīchedātmanokapho // kaphīviśodhitaṃjñātvāvātovā
tanivāraṇaṃ / pittasyaśamanaṃkāryavbhātvāpittasyakopanaṃ // śoṣaṇīyaṃvātaraṃ
ta
dhreṇatataḥpittaṃvināśayet˳ // tridoṣapratikriyā // viga˳y[874]ananiśāyāṃprāta
rutthāyatoth[875]aṃpicatikhalunaroyoghrāṇaraṃdhreṇanityaṃ // salyaḥścakṣkaṣāgṛddhadṛ
ṣṭi???marasadṛśakeśocyādhinirmuktadehaḥ //49[876]// kāsasvāsātisārajvara

[874] Y? blob.
[875] Or y?
[876] Rising 9.

6 lines and an Urdu seal. One stamp of it entirely smeared ink, one fairly clear. Bottom right hand-side of page Arabic 15.

piṭakapiṭā?kuṣṭapramehāt˛ // mūtrārodhyedarārttisvayadhugudarukarṇaśūlākṣirogā
t˛ // yecān?vātapittakṛtajakaphabhavāvyādhayaḥsaṃtijaṃtoḥ // stānapyabhyāsayo
gādapanayatipayaḥ // pīnaśaṃteniśāyāṃ //50// // dūtiśrīdṛhat˛kāla
jñānaṃvaidyakaṃsaṃmūrṇam // // saṃvat˛1693varśejeṣṭavadi12trayodaśī //
liṃkhitaṃkāyasthamāp?urame.v[877]arīyābhagotīdāsaputralikhitaṃgajā
dharadāsa // //śubhamastu // // dr?[878]pustakamiśrasadāśivasyarāmasagūyasyatyam˛
X seal 1 seal 2

[877] Dot under the v.

[878] This last section in smaller, lighter pen. First part of it is under smeared seal.

4 lines, upside down in orientation to previous pages and in respect to the Sanskrit number 20 at the bottom right-hand side of the page.

sadaśivaji pastaṃ
//śrīramo jāyati// ------
itipustāṃkālajñānā
patrāṃvisā 20[879]

[879] Here the zero is a dot versus a more or less circle as seen in the manuscript.

Appendix B: The *Qānūn*

درحقیقت دونوں قسمیں علم طب کی عملی باتیں ہیں اور عملی اور نظری میں فرق یہ ہے کہ جس قسم کو ہم نظری کہتے ہیں اس میں بیان اصول قواعد کا ہوتا ہے اور دوسری قسم جس عملی کہتیے ہیں اس میں بیان کیفیت مباشت اور استعمال انھیں قواعد کا ہوتا ہے۔
Footnote 532

خصوصاً شیوخ کو کہ انکے پٹھون مین انصباب نزول ہوتا ہے اکثر تو بمرگ مفاجات مر جاتے ہین اسلیے کہ مسالک روح مین ہجوم نزلات کا دفعتہً بکثرت ہو جاتا ہے۔
Footnote 534

جس شخص کو ہمیشہ خفقان عارض ہوا کرے چاہیئے کہ اپنی تدبیر کرے ایسا نہو کہ یکا یک مر جائے۔
Footnote 535

جسوقت بدن بھاری ہو جائے اور ماندگی پیدا ہو اور رگین پھول جائین فصد کھولنی چاہیے تاکہ کوئی رگ نہ پھٹ جائے اور سکتہ اور موت ناگہانی عارض نہو۔
Footnote 536

متواتر بیہوش رہنا بہت برا ہے اسواسطے کہ جگر اور دماغ کے مزاج کو فاسد کرتا ہے اور پٹھہ کو ضعیف کرتا ہے اور امراض عصب اور سکتہ اور مرگ مفاجات پیدا کرتا ہے۔
Footnote 538

لون مارنے کے بعد اگر پیاس کا غلبہ ہو فقط کلی کرنے پر اکتفا کرے اور سیراب ہو کر پانی نہ پیے ورنہ اسوقت مر جا یگا بلکہ کلی کرنے پر جرآت کرتا رہے۔
Footnote 539

جو شخص بری غذا کھا کر اسکو ہضم کرلے چاہیے کہ اپنی قوت معدی پر نازان نہو کہ غقریب بعد تھوڑے زمانے کے اسکے بدن مین ایسے اخلاط ردی پیدا ہوں گے جن سے مہلک بیماریاں قایل عارض ہونگی۔
Footnote 540

اور جس کو کیفیت عارض ہوا درجلد تدارک نہ کیا جائے فوراً مر جاتا ہے۔
Footnote 541

اگر قی ہو جائے اختناق پیدا نہو گا ایضاً حقنہ جو پہلے سے طیار رکھا ہوا ہے استعمال کرنا چاہیے۔
Footnote 542

چوتھا مرتبہ یہ ہے کہ اسکا ضرر مہلک ہوا درمزاج کو فاسد کر دے یہ خاصیت اور یہ سمیہ کی ہے
Footnote 543

جب اس سے زیادہ شدت ہو نبض مین تواتر پیدا ہوتا ہے اسکے بعد مریض ہلاک ہو جاتا ہے۔
Footnote 545

اور جو وجع شدید ہو اکثر قاتل ہوتا ہے اور کبھی پہلے پہل یہ بات پیدا ہوتی ہے بدن سرد ہو جاتا ہے اور ایک لرزہ اور جنبش سی پیدا ہوتی ہے کہ اسکی وجہ سے نبض صغیر ہو جاتی ہے۔ دلیل اسکی یہ ہے برودت کا اسقدر غلبہ بدنپر ہوتا ہے کہ اسکے سبب سے حرارت غریزی اور اصلی کے بر پا کرنے سے استغنا ہو جاتی ہے بعد ایسی حالت کے مریض کی موت واقع ہوتی ہے۔
Footnote 546

پس چاہیے حدس قوی کے ذریعہ سے دریافت کرے دومدت مین سے کونسی طولانی ہے ثبات قوت یا زمانہ بقاے درد یعنے تا زمانہ بقاے وجع قوت ساقط نہوگی
Footnote 548

اور اسکا بھی لحاظ کرے کہ زیادہ مضرت بقاے درد مین ہے یا دواے مخدر سریع الاخر سے جو مضرت پدا ہوگی وہ زیادہ ہے اور پھر جو اصوب ان دونون مین ہے تقدیم کرنی چاہیے۔
Footnote 549

(اسلیے کہ اکثر بقاے درد کا ضرر یہ ہوتا ہے کہ نوبت بہلاک پہونچ جاتی ہے) اور دواے مخدر سے ہلاکت نہین پدا ہوتی گو اور طرح مضرت ضرور ہوتی ہے۔
Footnote 550

جتنے آثار انسحلال کے ہین سب پیدا ہو جاتے ہین
Footnote 551

قوت کا اس مقدار پر پہونچنا کہ نبض عظیم ہو جائے اور برودت شدید حاجت اطفاے حرارت کی کم کر دے۔ یا بدرجہ غایت سقوط قوت ہو کہ مریض قریب بہلاکت پہونچے۔
Footnote 552

جب تک قوت تغذیہ کی باقی رہے عضو بھی زندہ رہےاور جسوقت قوت تغذیہ کی باطل ہو جاے عضو بھی میت ہو جاے
Footnote 553

اور بشیتر قوت تغذیہ کا فعل باقی رہتا ہے اور عضو میت ہو جاتا ہے۔
Footnote 554

ہر ایک عضو انحلال فرد اور تفرق اتصال کا متحمل نہین ہے مثلاً قلب اگر اس مین تفرق اتصال ہو ساتھ ہے موت واقع ہو جایگی۔
Footnote 556

آخرکار جب یہ تجفیف تمام ہوتی ہے اور رطوبت اصلی فنا ہو جاتی ہے اسوقت موت طبعی واقع ہوتی ہے۔
Footnote 557

حاصل یہ ہے کہ تسخین بارد کی ابتدا مین آسان تر ہے بہ نسبت تبرید حار کے ابتدا مین مگر تبرید حار کی انتہا مین اگرچہ دشوار ہے لیکن پھر بھی آسان ہے بہ نسبت تسخین بارد کے انتہا مین اس لیے کہ برودت جسکا زمانہ حد سے گذر جائے اور انتہا کو پہونچے گویا موت طبیعت کی وہی ہے اور موت کو اپنے ساتھ کھینچ لاتی ہے۔
Footnote 561

اور جسوقت حرکت روح کی طرف خارج کے ہوتی ہے۔ اندر جسم کا سرد ہو جاتا ہے اور اکثر جب حرکت بافراط ہوتی ہے دفعتاً تحلیل ارواح کی ہو کر ظاہر اور باطن دونون سرد ہو جاتے ہین اور اس کے بعد غشی عظیم یا موت واقع ہوتی ہے۔ اگر حرکت روح کی اندر کی طرف ہو اسکے تابع برودت ظاہر اور حرارت باطن ہوتی ہے۔ اورکبھی احتقان روح کا بشدت ہوتا ہے تو ظاہر اور باطن دونون سرد ہوجاتے ہین انکے بعد بھی یا غشی عظیم یا موت واقع ہوتی ہے۔۔۔ احتقان اور تحلل جو اوپر بیان ہے جن کی وجہ سے غشی یا موت عارض ہوتی ہے وہ بعد سی حرکت روح کے واقع ہوتے ہین جو دفعتہً ہو
Footnote 563

فصل مفرد سبب صحت اور مرض اور ضرورت کے بیان ہین
Footnote 564

حرارت غریزی بعد مدت سن وقوف کے نقصان شروع کرتی ہے اس سبب سے کہ اسکے مادہ رطوبت کو ہوا کہ جو محیط بدن انسان ہے جذب کرتی ہے اور حرارت غریزی ہوا کے جذب کو اندر سے معین ہوتی ہے
Footnote 567

یہی نقصان حرارت کا رفتہ رفتہ موت طبعی تک پہونچتا ہے جسکا زمانہ ہر شخص کیواسطے بحسب اسکے مزاج اولیٰ کے مقرر ہے۔ عام حد اس زمانہ کی جبتک ہے کہ قوت تبعی حفظ رطوبت کرسکے انسان مین ہر شخص کیواسطے اجل مسمیٰ مقرر کی گئی ہے کہ وہ اشخاص انسانی مین بنظر اختلاف امزجہ کے مختلف ہوتی ہے
Footnote 569

ہر اعتدال کی ایک حد خاص مقرر نہین ہے اور نہ واسطے ہر صحت کے ایک ہی حد معین ہے۔ اور نہ یہ بات ہے کہ ہر واحد مزاج کا اس بات مین داخل ہے کہ اس کے واسطے صحت کسی طرح کی یا اعتدال کسی قسم کا علے الاطلاق ثابت کیا جاے بلکہ ایک امر درمیانی دو امرون کے پایا جاتا ہے یعنے بعض امزجہ پر یہ بات صادق آتی ہے کہ اس پر غالباً صحت یا اعتدال کا اطلاق کیا جاتا ہے۔
Footnote 571

اور اس عالم مین غیرطبعی بھی اجل واقع ہوتی ہے کہ وہ طبعی سے الگ ہے اور ہر ایک کی ایک مقدار جدا گانہ ہے۔۔۔
Footnote 572

اور صناعت حفظ صحت کی ایسی نہین ہے کہ موت کی ضامن ہو یا بدن کو آفات خارجیہ سے بچاتی رہے اور نہ ایسی یہ صنعت ہے کہ ہر ایک بدن کو عمر طبعی تک جو مناست نوع انسان کے علی الاطلاق ہے پہونچا دے
Footnote 573

رطوبت مین عفونت نہ آنے دے اور رطوبت کی حمایت ایسی کرے کہ اس مین تحلیل جلد نہ آنے پائے ہان رطوبت کی قوت مین یہ بات ہے کہ اس مدت تک باقی رہے جس کو بحسب اپنے مزاج اولی کے یہ رطوبت مقتضی ہے
Footnote 574

اور یہ خواہش رطوبت کے باقی رہنے مین اس مدت تک بتدبیر صائب پوری ہو سکتی ہے وہ تدبیر یہ ہے کہ استبدال بدل ماتحلیل کا بقدر امکان ہوا کرے اور جتنے اسباب بعجلت تجفیف پیدا کرنے والے ہیں انکا غلبہ نہونے پائے نہ یہ کہ اسباب تجفیف کے مطلق پیدا نہونے پائین اور ایسی تدبیر کیجائے جو تولید عفونت سے بچا کر ضمانت اور حراست بدن کی غلبہ حرارت غریبہ سے خارجاً اور داخلا کرے اسواسطے کہ تمام ابدان قوت رطوبت اصلی اور حرارت اصلی مین برابر نہین ہین بلکہ اسباب مین ابدان مختلف ہین پس ہر ایک بدن کے واسطے ایک حد معین ہے کہ اسی حد تک مقاومت اور مقابلہ اس خشکی اور جفاف کا کر سکتا ہے جو خشکی بنظر مقتضاے مزاج اور حرارت غریزی اور رطوبت غریزی اس بدن کی واجب ہے اور اس حد سے بڑھکر مقابلہ نہین کر سکتا لیکن کبھی اس حد سے بیشتر اور اس زمانہ سے پہلے بہ سبب وقوع ایسے اسباب کے جو معین تجفیف پر ہون یا بوجہ دیگر مہلک ہون بعض ابدان کو تاب مقاومت کی ساقط ہو جاتی ہے
Footnote 575

طب ایسا علم ہے کہ جس سے انسان کے بدن کے حالات ازقبیل صحت اور زوال صحت دریافت ہوتے ہین فائدہ اس علم سے یہ ہے کہ صحیح آدمی کی صحت کا حفظ کیا جائے۔ اور بیمار کی صحت جو زائل ہو چکی ہے وہ پھیر لائ جائے۔
Footnote 576

علم تدبیر ابدان صحیح--- علم تدبیر بدن مریض--- بدن مریض کس طرح اپنی حالت صحت اصلی پر لایا جاتا ہے--- علاج
Footnote 577

جب قسم مرض پر آ گاہی ہو جس وقت کیفیت مرض پہچانی جائے واجب ہے کہ دوا مخالف کیفیت مرض کے اختیار کرین اسلیے کہ علاج مرض کا بالضد ہوتا ہے اور حفظ صحت بالمثل کیا جاتا ہے۔
Footnote 578

استبدال بدل ماتحلیل اس رطوبت کا جو بذریعہ غذا وغیرہ کے ہوتا رہا ہے
Footnote 579

اور کمی رطوبت غریزی مین جو بمنزلہ مادہ یا روغن چراغ کے پیدا ہوتی جاتی ہے
Footnote 581

ایسا خیال کیا جاتا ہے جیسے رطوبت مائ چراغ کی بڑھ جائے پس اگر فتیلہ پانی سے تر ہو جو بے کیفیتی اور برائ اشتعال چراغ مین پیدا ہوتی ہے کہ کبھی روشنی دیتا ہے اور کبھی قریب بجھنے کے ہو جاتا ہے۔
Footnote 582

رطوبت غریزی کو فنا کرتی ہے جیسے چراغ کہ اپنے آپ کو خود ہی بجھا دیتا ہے جب اپنے مادہ کو یعنی رطوبت روغن کو فنا کر دے
Footnote 583

عفونت کا قاعدہ ہے کہ پہلے رطوبت کو فاسد کرتی ہے بعد اسکے متحلل کرتی ہے۔ اور ایک شےخشک خاکستری کو بعد تحلل کے چھوڑ دیتی ہے۔
Footnote 584

پس صناعت حفظ صحت کی وہی ہے جو بدن انسان کو بہ تندرستی اسی حد معین تک اور اس سن تک جس کا اجل طبعی نام ہے پہونچا دے اور جو چیزین مناسب اس جسم کی صحت کے ہین ان کی محافظت کرے اس محافظت کی ضامن اور مدبر دو قوتین ہین کہ طبیعت ان کی خادم تصور کیجاتی ہے۔
Footnote 585

قوت حیوانی
Footnote 586

پہلی تدبیر کا تمام ہونا بہ نسبت ان لوگونکے خیال کیا جاتا ہے جو اکثر لذات کو ترک کرین اور پابندی اور التزام انکے مزاج مین زیادہ ہو اور زمانہ دراز تک صبر کر سکین تااینکہ رفتہ رفتہ انکا مزاج بطرف اعتدال کے رجوع کرے اسلیے کہ اگر انکی تدبیر بلا تدریج کی جاے اکثر امراض پیدا ہونگے دوسری تدبیر اسی غذا سے ممکن ہے جو مشابہ انکے مزاج کے ہوتا کہ انکی صحت موجود بحال خود باقی رہے۔
Footnote 587

مزاج ایک نئی کیفیت ہے جو کیفیت متضادہ کے آپسمین فعل وانفعال سے پیدا ہوتی ہے--- از انجا کہ اولی قوتین ارکان اربعہ مذکور کی حرارت و برودت و یبوست و رطوبت ہین اس سے صاف ظاہر ہے کہ مزاج ان اجسام کا جوان ارکان سے نبین مجموعہ انہین کیفیت کا ہوگا۔
Footnote 588

مقدار کیفیت اربعہ کی برابر ہو
Footnote 589

خواہ رطوبت و یبوست مین سے کوئ کیفیت غالب ہو خواہ حرارت و برودت مین ایک کیفیت زائد ہوگی
Footnote 590

معتدل ,غیر معتدل
Footnote 591

یہ بھی جاننا چاہیے کہ لفظ معتدل جسے اطباء اپنے فن مین استعمال کرتے ہین وہ مشتق تعادل سے نہین ہے جسکے معنے ہموزن اور برابر ہونے کے ہین بلکہ معتدل مشتق ہے عدل فی القسمت سے باینمعنے کہ وہ مرکب جسے اطباء معتدل کہتے ہین خواہ تمام بدن فرض کیا جاے یا عضو مخصوص اسکو عناصر کی کیفیات اور کمیات سے ایسا پورا حصہ ملا ہے جو نہایت مناسب بدن انسانی کے ہے
Footnote 593

حیات بجہت حرارت کے اور نشوونما بوجہ رطوبت کے ہے بلکہ حرارت رطوبت سے قوام پاتی ہے۔
Footnote 595

جو شخص آرزومند اپنی صحت کا یقیناً ہو چاہیے کہ بےاشتہاے صادق کے کچھ نکھائے اور جبتک اسکا معدہ اور اوپر کی آنتین غذاے اول سے خالی نہو جائین اسلیے کہ بہت مضر بحال بدن یہی ہے
Footnote 597

جو شخص اپنی حفظ صحت کا طالب ہے اسے واجب ہے کہ اس بات مین کوشش کرے کہ اسکی غذا کوئ شے غذائے دوائ سے بہو جیسے ترکاری اور فواکہ وغیرہ
Footnote 598

اس کے سوا اور کوئ چیز کھانے اور پینے مین استعمال نہکرنی چاہیے مگر بر سبیل علاج یا تقدم با لحفظ کے
Footnote 599

حرکت ارادی ہے جو تنفس عظیم اور متواتر کی طرف شخص انسانی کو مضطر کرتی ہے
Footnote 600

اس حرکت کے جو روح غریزی کو کہ آلہ حیات ہر عضو کا وہی ہے بطرف اعضا کے کھنیچنے والی ہے۔
Footnote 601

اسکا فعل یہ ہے کہ ہمارے بدن مین صحت پیدا کرتی ہے اور ہماری صحت بدنی کی حفاظت کرتی ہے
Footnote 603

اور جس شخص کو توفیق استعمال ریاضت کی بر وجہ اعتدال اپنے وقت خاص مین ہو اس شخص کو ہر ایک علاج سے بے پروائ حاصل ہوتی ہے یعنے جس علاج کی خواہش امراض مادی اور امراض مزاج کو جو تابع امراض مادی کے ہوتے ہین
Footnote 604

دواے مسہل جس طرح تنقیہ مواد کا کرتی ہے اسی طرح اذیت بھی دیتی ہے اور باانہمیہ جس طرح مواد فاسد کا استفراغ ہوتا ہے اسی طرح خلط فاضل یعنے اچھی خلط اور رطوبات غریزی اور روح وہ روح کہ جو جو ہر حیات ہے اس سے بھی ایک مقدار صالح نکلجاتی ہے اور یہ سب باتین قوت اعضائے رئیسہ اور خادمہ کو ضعیف کر دیتی ہین پس یہ امور اور انکے سوا اور بھی مضرتین امتلا کی ہین جو بحال خود متروک ہو جاتی ہین
Footnote 605

بخاریت اخلاط اور ان کی لطافت سے پیدائش اس چیز کی ہوتی ہے جسکا جو ہر لطیف ہے اور وہ روح ہے
Footnote 607

محرک اول
Footnote 608

روح بوجہ قوت حیوانی کے مبدء اول اور نفس اولیٰ کو قبول کرتی ہے وہ نفس جس سے سب قوتین برانگیختأ ہوتی ہین
Footnote 609

قوت حیونی یعنے وہ قوت جو امر روح کی تدبیر کرتی ہے وہ روح جو مرکب ہے حس و حرکت کا
Footnote 610

اور قوت نفانی کو راحت پہنچتی ہے
Footnote 613

نوم معتدل بروقت اعتدال اخلاط کے مقدار اور کیفیت مین رطوبت اور حرارت بیدار کرتی ہے
Footnote 615

تدبیر ان لوگون کی استعمال اس چیز کا ہے جس سے ترطیب اور تسخین ساتھ ہی حاصل ہو اور نیند کا بڑھانا
Footnote 617

ہے بعض ابدان مین یہ فائدہ ظاہر ہوتا ہے اور بعض مین نہین ہوتا ہے بلکہ ابدان مین اس حجامت کی وجہ سے شیب بہت جلد پیدا ہوتا ہے۔
Footnote 619

جسکے امعاء ضعیف ہون اکثر دواے مسہل سے ایسا اسہال شدید اسکو عارض ہوتا ہے کہ اسکے بند کرنے مین نہایت وقت ہوتی ہے اور بہت سے علاج کے بعد اسکے دست بند ہوتے ہین
Footnote 621

ہضم جید ہوتا ہے اور عمر طویل ہوتی ہے
Footnote 625

تاکہ ابدان کو مضرات سے بچانے کی طرف اور تدبیر حفظ ما تقدم کی بخوبی کرے
Footnote 626

ایک مرتبہ یہ ہے کی بدن نہایت درجہ صحت پر ہو دوسرا مرتبہ یہ ہے کہ منتہاے درجہ صحت سے کم ہو تیسرا مرتبہ یہ ہے کہ بدن نہ صحت ہو اور نہ مریض جیسا کہ حالت ثالثہ کے بیان مین گذرا چوتھا مرتبہ یہ ہے کہ بدن غیر صحت قابل مرض کا جلد ہو پانچوان مرتبہ یہ ہے کہ بدن مریض مند کے بیمار ہو چھٹی مرتبہ یہ ہے کہ نہایت درجہ مرض پر ہو
Footnote 629

جو مرض ہے یا مسلم ہے یا غیر مسلم ۔ مسلم وہ مرض ہے کہ جسکے معالجہ کا کوئ مانع اور عائق جیسا چاہیئے نہو۔ اور غیر مسلم وہ ہے کہ اسکے ہمراہ معالجہ کا ایک عایق بھی موجود ہو کہ اسکے معالجہ مین تدبیر صائب کی رخصت مندے
Footnotes 630 & 631

دستکار
Footnote 632

بخوبی غور اور فکر کرتا رہے
Footnote 633

ابتدا۔ تزید۔ انتہا۔ اغطاط
Footnote 635

پھر بھی اسکا خیال رہے کہ بروز حرکت مرض کے فصد اور استفراغ نہ کرنا چاہیے اسلیے کہ وہ روز راحت و آرام کا ہے اور اسدن سونا مفید ہوتا ہے اور اسدن مرض کا ثوران اور غلبہ ہوتا ہے
Footnote 636

اگر مرض کے پہچاننے مین اشکال ہو طبیعت پر چھوڑ دینا چاہیے اور علاج مین عجلت نکرنی چاہیے۔ پس طبیعت یا مرض پر غالب آئیگی یا مرض بخوبی ظاہر ہوگا۔
Footnote 637

پھر بھی اگر ضرورت دوبارہ نشتر لگانے کی ہو۔۔۔
Footnote 638

ہر ایک تغیر حال کو خواہ ثبات اور استمرار شے کو بحال واحد ایک سبب درکار ہوتا ہے
Footnote 639

جو چیز پہلے موجود ہو اور اسکے موجود ہونے سے کسی حالت کا حالات بدن سے موجود ہونا یا کسی حالت پر بدن انسان کا ثابت رہنا واجب ہو جائے۔۔۔ مرض ایک ہیات غیر طبعی ہے بدن مین انسان کے جس کی ہمت سے بالذات کوئ آفت کسی فعل مین واجب ہو وجب اولیٰ کر کے اور یہ بات یا مزاج غیر طبعی سے پیدا ہوتی ہے یا ترکیب غیر طبعی سے عارض ہوتی ہے۔۔۔ اور عرض وہ چیز ہے جو اس ہیاءت غیر طبعی کا تابع ہو
Footnote 641

کبھی ایک ہی چیز بقیاس اپنی ذات کے اور بہ نظر ایک چیز کے جو اس سے پیشتر بھی بقیاس ایک چیز جو اسکے بعد ہوئ سبب اور مرض اور عرض ہوتی ہے
Footnote 642

بعض اقسام کے درد ہوتی ہین کہ باوجود شدت وجع کے علاج انکا آسان ہوتا ہے
Footnote 644

ام جو عظیم اور مہلک
Footnote 645

مزمن
Footnote 646

امراض مزمنہ مین بھی تقلیل غذا کی کرتے ہین مگر بہ نسبت امراض حادہ کے بہت کم اس واسطے کہ توجہ ہمارا علاج مین امراض مزمنہ کی بطرف بقاے قوت کے زیادہ ہوتا ہے۔ اس سبب سے کہ ان کا بحران اور منتہاء دور ہوتا ہے۔
Footnote 648

بھرا، خامی
Footnote 650

کمتر صحیح ابدان مین کوئ مرض اس فصل مین پیدا ہوتا ہے--- آفت عظیم
Footnote 650

یہ فصل اخلاط بستہ کو جاری کر کے اس مین سیلان پیدا کرتی ہے اس وجہ سے اس فصل مین جنکو مرض مالخیولیلا کا ہے انکے مرض کا ہیجان ہوتا ہے
Footnote 651

جدری
Footnote 654

اگر تغیر فصول کثیرکا تدارک تغیر کسی فصل مورث وبا کا کرے
Footnote 655

سب سے زیادہ جس ہوا مین عفونت کی قابلیت ہے اسی ہوا کا مزاج ہے جو گرم و تر ہو۔
Footnote 656

بعض دوائین مسہل کی ایسی ہوتی ہین کہ انکو مناسبت بعض امزجہ سے ہوتی ہے۔ اور بعض امزجہ سے انکو مناسبت نہین ہوتی
Footnote 657

معالجین کو حکم دیا جاتا ہے کہ جب کسی شخص کی تبدیل مزاج کرنا چاہین ایک دوا پر اقتصار کرین جسوقت کہ اثر اسکا ظاہر نہوتا ہو بلکہ دوسری دوا بدل دین
Footnote 658

فصد ایک استفراغ خاص ہے واسطے ہر ایک خلط کے برابر
Footnote 659

اور امراض مین زیادتی پیدا ہو غذا کی تقلیل کرتے ہین باعتماد تدبیر سابق کے۔ اور بخیال اس بات کے کہ قوت کو وقت مجاہدہ مرض کے دو طرف متوجہ ہونے کا بوجھ نہ پڑے
Footnote 660

اگر سبب مرض کا حرارت اور برودت مین مشتبہہ ہو اور ارادہ یہ ہو کہ تجربہ سے دریافت کرین چاہیے کہ قوی دوا سے تجربہ نہ کیا جائے ورنہ جو تاثیر دواے قوی سے کیفیت بالعرض پیدہ ہوگی اصلی سبب کے پہچاننے مین دھوکا کھاویگی۔
Footnote 662

بعض ادویہ مسہلہ ایسے ہین کہ انکا ضرر بہت زیادہ ہوتا ہے جیسے خربق سیاہ یا تربد اگر سپید نہ ملے بلکہ زرد ہو
Footnote 663

اگرچہ منافع ہین تاہم اکثر امراض بوجہ قے پیدا ہوتے ہین جیسے طرش
Footnote 664

ایک خطرہ مسہل کے پینے مین یہ ہے کہ بروقت پینے مسہل کے کوئ خشک فضلہ امعاء مین موجود ہو
Footnote 665

اشہال اور فی اس شخص کو بہت دشوار ہے جسکا مراق لاغر ہو اکثر ایسے شخص کو تعب پیدا ہوتا ہے خالی اندیشہ سے نہین ہے
Footnote 666

بلکہ اگر دواے مسہل عمل نکرے اور اسکے بعد اعراض بد پیدا نہون جب بھی فصد کرنا چاہیے (گو دو تین دن بعد) کیون نہو اسلیے کہ اگر فصد نہ لیجائے خوف حرکت اخلاط کا طرف بعض اعضاے رئیس کے ہوتا ہے۔
Footnote 667

تحریک
Footnote 668

اور اکثر دواے مسہل کے قی کر ڈالنے کی ایسے وقت حاجت ہوتی ہے۔ اور بیشتر یہ دشواری فقط قابض چیزونکے کھانے سے دفع ہو جاتا ہے۔
Footnote 669

یہ بھی جاننا ضرور ہے کہ نشتر کند سے مضرت زیادہ پیدا ہوتی ہے اسلیے کہ اس سے خطا پیدا ہوتی ہے اور رگ تک نہین پہونچتا ہے اور ورم پیدا ہوتا ہے
Footnote 670

اگر نشتر درست ہوا سے اندر چبھونا جائز نہین ہے بلکہ بآسانی رگ تک سرا نشتر کا پہونچانا چاہیے اور یہی کو شش کرنی چاہیے کہ رگ خوب ابھر آئے
Footnote 672

کبھی بعد درد کے ایک کھٹک باقی رہتی ہے کہ حقیقت مین وہ درد نہین ہے
Footnote 674

اور جاہل نادانی سے اسکے علاج مین مشغول ہوتا ہے پس ضرر پہونچتا ہے۔
Footnote 675

وہ سب خون کو روک دیتے ہین۔ اگ براہ خطا یا ضرورت خون نکالا گیا ہو۔
Footnote 676

اکثر قوی دوائین جس مین سمیت ہے وہ اسہال کو اسطرح پیدا کرتی ہین کہ طبیعت پر غالب آ جاتی ہین اسی واسطے واجب ہے کہ ایسی دواؤن کی اصلاح ان چیزون سے کرنی چاہیے جنمین قوت فادزہر کی موجود ہو
Footnote 672

مدت دراز مین منتہی طرف اہلاک کے ہوتا ہے مگر تحلل اس کا بہت دشوار ہے اور نضج پانے مین اسکے نہایت وقت ہے علاج پذیر بھی مشکل ہوتا ہے
Footnote 678

کبھی انکے بدن مین بثور اور دانے برآمد ہوتے ہین اگر بشکل قرحہ کے سیاہ سیاہ ہون قاتل ہین اور اگ سفید ہون اسلم ہین اور اسی طرح سرخ اور اگرقلاع ہے اور سیاہ ہو جب بھی قتال ہے پھر اسکا تمام بدن مین پھیل جانا کیونکر مہلک نہوگا۔ بیشتر ایسے بثور کے نکلنے مین بہت سے منافع ہوتے ہیین بہر حال ان بثور کا علاج مجففت لطیف سے کرتا چاہیے جو ایسے پانی مین داخل کیے جائین جیسے بثور دھوئے جاتے ہین اور اسمین مثل گل سرخ اور آس اور برگ شجر مصطگی یا جھاؤ کی پتی جوش دی گئی ہو۔
Footnote 679

Appendix C: The *Qabriya*

بعونہ تعلیٰ

کتاب لاجواب مشہور و معروف فن طب اعنی قانونچہ عربی کا اردو ترجمہ

موسوم بہ

ترجمہ قانونچہ اردو معہ رسالہ قبریہ

جسکو

علم المعی فاضل لوذعی مولوی حکیم غلام حسنین صاحب کنتوری نے منجانب مطبع بزبان اردو ترجمہ فرمایا

مطبع منشی نولکشور لکھنو میں طبع ہوا ۱۸۸۹

یہ وہ رسالہ ہے جسکو میں شروع کرتا ہون ترجمہ کتاب بقراط سے جو کہ عالم یونانی حکیمون کا اور حکیم تھا بڑے بڑے ماہران اور کا ملان فن طب ہین۔ اور وہی رسالہ ہی جو قبر میں بقراط کی ملا تھا جب کسی غرض سے قبر کھولی گئی تھی۔ اس رسالہ کو یونانی زبان سے زبان عربی مین حنین بن اسحاق نے ترجمہ کیا زنانہ خلافت اور سلطنت مامون رشید میں۔ اور حنین نے یہ بھی کہا ہے کہ مجھے معلوم ہوا تاریخ کے دیکھنے سے کہ جب بقراط کا وقت وفات قریب آیا اسوقت اسے نے حکم دیا تھا کہ یہ مجموعہ احکام اسکی قبر میں رکھدیا جاے اور یہ سب چپیس قضایا ہین اور بقراط نے حکم دیا تھا کہ انکو ہاتھی دانت کے دبہ مین بند کرکے قبر مین رکھدین تاکہ ان پر کوئ آدمی اگاہ نہو جب یہ خبر معلوم ہوئ بادشاہ روم نے حکم کیا کہ یہ درہاے بے بہا ڈبہ سے نکالے جائین

پہلا حکم اگر کسی بیمار کے چہر پر ورم ہو اور اسکا سبب معلوم نہوتا ہو اور بایان ہاتھ بیمار کا سینہ پر اسکا رکھاں ہے پس معلوم کرنا چاہیے کہ وہ شخص تیرہ روز کے اندر مر جائیگا۔ خصوصاً اگر اول مرض میں اپنے نتھنے کو کھجلاتا ہو اور ایسے عبث بیکار فعل میں مبتلا ہو

دوسرا حکم اگ مرض کے دونون زانون میں ورم شدید اور عظیم ہو معلوم کرنا چاہیے کہ تین روز کے اندر مر جائیگا خصوصاً اگر اول مرض میں اسکو پسینا زیادہ آتا ہو

تیسرا حکم اگر رگ جہنرہ پر جو گردن میں واقع ہے اور اسکو ثریان سبات کہتے ہیں جو نیند پیدا کرتی ہے چھوٹا سا دانہ آتشک کے مرض کا برآمد ہو مثل صورت مچھر جو کے اسکی صورت ہو معلوم کرنا چاہیے کہ وہ بیمار باون روز کے اندر مر جائیگا اور نشانی اسکے مرنے کی یہ ہوگی پیاس اسے زیادہ لگےگی

چوتھا حکم اگر کسی مریض کے دانہ (از قسم طاعون خواہ آتشک کے ہو) مثل بعرہ کے ہوں اور یہ وہ مکھی ہے جسکو ذباب کلب کہتے ہیں جو کہ مشابہ تخم بیداخجیر کے ہوتی ہے معلوم کرنا چاہیے کہ یہ مریض اسی

دن مر جائیگا۔ اور نشانی سکی یہ ہے کہ اول مرض میں یہ مریض گرم چیزوں کے کھانے کی خواہش کریگا جسکی طبیعت خواہ کیفیت میں حرارت ہو

پانچوان حکم اگر کسی کی بعض انگلیون پر ایک پھنسی چھوٹی سی سیاہ مشابہ مٹر کے دانہ کے ہو اور درد شدید ہے اسکو بے آرام کرے معلوم کرنا چاہیے کہ یہ آدمی اپنے مرض سے دو روز کے اندر مر جا یگا اور نشانی اسکی یہ ہے کہ ابتداے مرض میں وہ بہکیگا یعنے ہذیان اور اختلاط عقل عارض ہوگا

چھٹا حکم اگر کسی کے بایان ہاتھ کے انگوٹھے میں خواہ بایان پانون کے انگوٹھے مین دانہ آتشک کا خشک مشابہ دانہ باقلا کے ہو اور رنگ دانہ کا تیرہ ہو درد انہیں مطلق نہوتا ہو پس معلوم کرنا چاہیے کہ یہ شخص اندر چھ روز کے مر جائیگا ابتداے مرض سے۔ اور شناخت اسکی یہ ہے کہ ابتداے مرض میں اسکو دست زیادہ آنے ہونگی

ساتوان حکم اگر کسی شخص کے داہنے پانوں کے بیچ کی انگلی پر ایک دانہ برآمد ہو جسکا رنگ مثل رنگ اجال دیے ہوے سونے کے زرد ہو جیسا زرد سونا زرگر چرخ دینے کے بعد نوسادر اور شورہ دیکرنکا لتے ہیں پس معلوم کرنا چاہیے کہ یہ مریض ابتداے روز مرض سے بارہ دن کے اندر مر جائیگا اور نشانی اسکی یہ ہے کہ اول مرض میں اسکی خواہش تیز اور چٹپٹی کھانے شدت سے ہوگ

آٹھوان حکم جب ناخن انگلیون کے تیرہ گون ہون اوف پشیمانی پر اس شخص کے سرخ رنگ کا دانہ پیدا ہو معلوم کرنا چاہیے کہ یہ مریض چار دن کے اندر مر جائیگا ابتداے مرض سے۔ اور نشانی اس حکم کے صحت کی یہ ہے کہ مریض زیادہ چھینکتا اور زیادہ جمائ لیتا ہوگا

نوان حکم اگر کسی کے دونون پانون کے انگوٹوں میں بشدت کھجلی ہو اور گردن کا رنگ زیادہ تیرہ ہو معلوم کرنا چاہیے کہ یہ مریض اپنے شروع مرض کے پانچو روز مر جائیگا قبل از انکہ تنفس اسکا بند ہو اور نشانی صحت حکم ہذا کی یہ ہے کہ وہ مریض اپنے اسی مرض مین پیشاب زیادہ کرتا ہوگا

دسواں حکم اگر کسی مریض کی پلک پر تین دانہ (حمرہ وبائہ) کے ایسے ہون کہ ایک انمیں سے سیاہ ہو اور دوسرا نیلگوں پس معلوم کرنا چاہیے کہ یہ آدمی سات روز کے اندر مر جائیگا اور نشانی صحت حکم ہذا کی یہ ہے کہ اول مرض مین اسکو تھوک زیادہ آتا ہوگا

گیارھوان حکم اگر کسی کی آنکھ کے ایک پپوٹے پر دانہ شبیہ اخروٹ کے پیدا ہو نرم اور تیرہ رنگ معلوم کرنا چاہیے کہ یہ آدمی ایک روز سے لیکر دو روز تک مر جائیگا ابتداے مرض سے اور نشانی اسکی یہ ہے کہ اول مرض سے اسکو نیند زیادہ آتی ہوگی

بارھوان حکم جب بیمار کے دونون نتھنون سے خون زردی اور سرخ ملا ہوا بہنا ہو اور داہنے ہاتھ مین اسکے دانہ سپیدی مائل برآمد ہو کہ انہین درد نہو معلوم کرنا چاہیے کہ یہ آدمی ابتداے مرض سے تین روز کے اندر مر جائیگا اور نشانی اسکی یہ ہے کہ ابتداے مرض میں اسکو اشتہائے طعام نہوگی

تیرھوان حکم اگر مریض کی بائین ران میں حمرہ شدیدہ یعنی سرخ بادہ نمودار ہو اور درد انہین مطلق نہو اور طول ورم کا تین انگشت ہو پس معلوم کرنا چاہیے کہ یہ مریض ابتداے اپنے مرض کے پچیس روز کے اندر مر جائیگا اور نشانی صحت حکم یہ ہے کہ اول مرض مین اسکو کھجلی زیادہ معلوم ہونی ہوگی اور بقول یعنی ساگ ترکاری کھانے کی رغبت اسکو زیادہ ہوگی

چودھوان حکم اگر بائیں کان کے پیچھے دانہ سخت مشابہ دانہ نخود کے ہو معلوم کرنا چاہیے کہ یہ شخص بیس روز کے اندر ہی اندر وقت ظہور دانہ مذکور کے مر جائیگا نشانی اسکے صحت کی یہ ہے کہ ابتداے مرض میں اسکو پیشاب زیادہ آتا ہوگا

پندرھوان حکم اگر بائین کان کے پیچھے دانہ نمودار ہو معلوم کرنا چاہیے کہ یہ بیمار روز مرض سے چوبیس دن کے اندر مر جائیگا اور نشانی صحت حکم کی یہ ہے کہ ابتداے مرض مین یہ مریض مشتاق آب سرد کے پینے کا زیادہ ہوگا

سولھوان حکم اگر داہنے کان کے پیچھے سرخ دانہ تیزی اور حدت کے ساتھ ہو جیسے آگ سے جل جانے سے آبلہ پڑ جاتا ہے اور جسامت مین برابر باقلا کے ہو معلوم کرنا چاہیے کہ یہ مریض سات دن کے اندر مر جائیگا ابتداے مرض سے اپنے اور نشانی صحت حکم کی یہ ہے کہ اول مرض مین اسکو قے زیادہ آتی ہوگی

سترھوان حکم آگر کسی کے لحیہ یعنی داڑھی کے نیچے سُرخ دانہ برابر باقلے کے دانہ کے برآمد ہو معلوم کرنا چاہیے کہ یہ مریض باون روز کے اندر مر جائیگا اور نشانی اُسکی یہ ہی کہ ابتداے مرض مین بلغم یا مدہ کھنکھار سے اُسکے زیادہ خارج ہو ۔

اٹھارھوان حکم بعض آدمیون کے حشفہ یعنی سر ذکر مین درد شدید ہوتا ہے اور اگر کسی کے یہ درد ہو اور بعد ازان اُسکے مرفق یعنی بنددست خواہ کلائ مین ایک دانہ تیرہ رنگ پیدا ہو وہ مریض پانچوین دن مر جائیگا اور نشانی صحت حکم کی یہ ہے کہ اوّل مرض مین اُسکو شراب پینے کی خواہش زیادہ ہوگی

اُنیسوان حکم اگر دائین طرف بدن کے کسی جگہ کوئ پھنسی از قسم طاعون خواہ آتشک کے برآمد ہو کہ رنگ اُسکا تیرہ ہو معلوم کرنا چاہیے کہ شخص بعد چھ دن کے ابتداے مرض سے مر جائیگا قبل طلوع آفتاب کے اور نشانی صحت حکم کی یہ ہے کہ ابتداے مرض اُسکو جمائ زیادہ آتی ہوگی

بیسوان حکم اگر کسی کی بائین بغل مین پھنسی برابر ہی کے پیدا ہو معلوم کرنا چاہیے کہ یہ آدمی پچیس دن کے اندر مر جائیگا ابتداے مرض سے اور نشانی اُسکی یہ ہے کے اُسکو گہری نیند زیادہ آتی ہوگی

اکیسواں حکم اگر کسی کے کعب یعنی قبہ قدم پر سیاہ پھنسی طاعون وبائ برآمد ہو معلوم کرنا چاہیے کہ یہ شخص اٹھائیس روز کے اندر ابتداے مرض سے مر جائیگا اور نشانی صحت حکم کی یہ ہے کہ یہ شخص اپنے اوّل مرض مین ہوائے سرد اور سرد غزاؤن کا زیادہ مشتاق ہوگا۔

بائیسواں حکم اگر کسی کی بائین کنپٹی پر دانہ جسکا رنگ سُرخ ہو برآمد ہو معلوم کرنا چاہئیے کہ یہ آدمی چار روز کے اندر ابتداے مرض سے مر جائیگا اور نشانی صحت حکم کی یہ ہے کہ ابتداے مرض مین آنکھوں مین ایسی کھجلی اُٹھی ہوگی جس کے کھجلانا سے اُسکو مہلت نہ ہوگی اور بدون کھجلائے رہا نہ جاتا ہوگا۔

.

تیئیسوان حکم اگر کسی کے وسط سر مین ورم نرم مثل اخروٹ کے پیدا ہوا جس مین درد نہو۔ معلوم کرنا چاہئیے کہ یہ آدمی روز مرض سے نوے دن کے اندر مر جائیگا نشانی صحت حکم کی یہ ہے کہ اوّل مرض مین اُسکے اونگھ زیادہ رہتی ہوگی اور خربزہ یا تُربز کھانے کا زیادہ مشتاق ہوگا اور پیشاب بھی اُسکو زیادہ آتا ہوگا۔

چوبیسوان حکم اگر کسی کی کنپٹی مین ورم سیاہ مثل مچھر کے ہو اور سیا ہی اُس مین زیادہ ہو معلوم کرنا چاہئیے کہ یہ مریض ابتداے مرض سے تین ماہ کے اندر مر جائیگا۔ نشانی اُس کی ہے کہ // اوّل مرض مین

اُسکو خواہش تُربز کھانے کی ہوگی اور بہت سا پانی پینے کی اور پیشاب بھی زیادہ اُسکو آتا ہو جیسا بقراط نے سرد ترکاری اور ساگ کی خواہش مین لکھا ہے (دیکھو چودھوان حکم)

پچیسوان حکم اگر کسی کی گردن کے نیچے اور بائین آنکھ کے پپوٹے پر سفید پھنسی پیدا ہو معلوم کرنا چاہئیے کہ یہ آدمی ابتداے مرض سے اکیس شبون کے اندر مر جائےگا اور نشانی صحت حکم ہذا کی یہ ہے کہ اُسکو اوّل مرض سے میٹھے کھانے کی اور خراب غزاؤن کی اشتہا ہوگی۔

تمام ہوا رسالہ قبریہ مصنفہ حکیم بقراط

خاتمہ از طرف مترجم
چونکہ ان سب احکام کو شخ الرئیس نے کتاب قانون جلد چہارم مقام بحران میں اور دیگر مقامات مین لکھا ہے اور ان کی دلیلین بھی لکھدی ہیں اور اسی طرح سے ابوالعباس مجوسی نے کامل الصناعہ میں جابجا انکو درج کیا ہے مع دلائل کے اور قانون اور کامل اصناعہ ترجمہ اردو ہم کر چکے ہیں اور ان احکام کو سلیس اردو میں لکھ چکے ہیں ہذا جداگانہ اس رسالہ بھی ترجمہ کر دیا کہ طالب علم مبتدی ان پچیسون احکم کو یاد کرلے

اس کی ایک وجہ تو یہ ہوسکتی ہے کہ یہ ایک نہایت مختصر رسالہ ہے۔ ممکن ہے حنین کے تراجم کے ذکر مین مورخین نے اس ترجمہ کو اہمیت نہ دی ہو۔

اس شرح کے ابتدائ تعارفی جملوں میں رسالہ کو قبریہ کے نام سے موسوم کیا گیا ہے

اور بیشتر بول زیتی چوتھے دن مرض کے دلالت کرتا ہے کہ مریض ساتوین دن موت پائےگا بشرطیکہ وہ مرض امراض حادہ سے ہو

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